

Illinois' Forests, 2005: Statistics, Methods, and Quality Assurance



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Abstract

The first full annual inventory of Illinois' forests was completed in 2005. This report contains 1) descriptive information on methods, statistics, and quality assurance of data collection, 2) a glossary of terms, 3) tables that summarize quality assurance, and 4) a core set of tabular estimates for a variety of forest resources. A detailed analysis of inventory data is presented in a separate publication (Crocker et al. 2009). This publication supplements information found in "Illinois' Forests 2005" Resource Bulletin NRS-29 (Crocker et al. 2009). A paper or digital copy of this publication can be obtained via <http://www.nrs.fs.fed.us/pubs/>.

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CONTENTS

Forest Inventory Methods.....	1
Strategic Model.....	1
Forest Inventory.....	1
Plot Configuration	2
Sample Design	2
Three-phase Inventory.....	3
Estimation	5
Integration with Previous Inventories.....	5
Quality of the Estimates.....	6
Sampling Error.....	6
Measurement Error.....	7
Prediction Error.....	8
Nonresponse Error	8
Glossary	10
Appendix A.....	18
Sampling Table Captions.....	21
List of Tables.....	21
Area	21
Number	21
Volume.....	21
Growth, Mortality, and Removals.....	22
County-Level.....	22
Literature Cited	24
Tables	26

FOREST INVENTORY METHODS

Strategic Model

The Forest Inventory and Analysis program of the Northern Research Station (NRS-FIA) is part of the national enhanced FIA program that focuses on a set of six strategic objectives (McRoberts 2005):

Objective 1: A standard set of variables with nationally consistent meanings and measurements

Objective 2: Field inventories of all forested lands

Objective 3: Nationally consistent estimation

Objective 4: Adherence to national precision standards

Objective 5: Consistent reporting and data distribution

Objective 6: Credibility with users and stakeholders

To ensure that these six strategic objectives are achieved, 10 strategic approaches have been prescribed:

Approach 1: A national set of prescribed core variables with a national field manual that prescribes measurement procedures and protocols for each variable

Approach 2: A nationally consistent plot configuration

Approach 3: A nationally consistent sampling design

Approach 4: Estimation using standardized formulas for sample-based estimators

Approach 5: A national database of FIA data with core standards and user-friendly public access

Approach 6: A national information management system

Approach 7: A nationally consistent set of tables of estimates of prescribed core variables

Approach 8: Publication of statewide tables of estimates of prescribed core variables at 5-year intervals

Approach 9: Documentation of the technical aspects of the FIA program including procedures, protocols, and techniques

Approach 10: Peer review and publication of the technical documentation for general access

The result of the strategic objectives and approaches is an inventory program with identifiably new features and a nationally consistent plot configuration, a nationally consistent sampling design for all lands, annual measurement of a proportion of plots in each state, nationally consistent estimation techniques and algorithms, and integration of the ground sampling components of the FIA inventory and the detection monitoring by the U.S. Forest Service's Forest Health Monitoring (FHM) program.

Forest Inventory

Historically, the Northern Research Station's Forest Inventory and Analysis (NRS-FIA) program conducted inventories of a State's forests on a periodic basis. In Illinois, periodic inventories were completed in 1948 (Cent. States For. Exp. Stn. 1949), 1962 (Essex and Gansner 1965), 1985 (Raile and Leatherberry 1988), 1998 (Schmidt et al. 2000). Since the 1998 inventory, several changes in FIA methods have improved the quality of the inventory. The most significant change between inventories has been the shift from periodic to annual inventory. In the past, FIA inventoried each state on a cycle that averaged every 12 years. However, the need for timely and consistent data across large geographical regions along with national legislative mandates resulted in FIA implementing an annual inventory program. Annual inventory was initiated in Illinois in 2001.

With the NRS-FIA annual inventory system, approximately one-fifth of all field plots are measured each year. The entire inventory is completed within 5 years. After this initial 5-year period, NRS-FIA will report and analyze results using a moving 5-year average. For example, NRS-FIA will be able to generate inventory results for Illinois for 2001 through 2005, for 2002 through 2006, and so on.

Other significant changes between inventories include implementing new remote-sensing technology, a new field-plot configuration and sample design, and gathering

additional remotely sensed and field data. The use of new remote-sensing technology allows NRS-FIA to use classifications of Multi-Resolution Land Characterization (MRLC) data and other remote-sensing products to stratify the total area of Illinois and to improve estimates.

New algorithms were used for the 2005 inventory to assign forest type and stand-size class to each condition observed on a plot. These algorithms are being used nationwide by FIA to provide consistency from state to state. As a result, changes in forest type and stand-size class between states will reflect actual changes in the forest and not changes due to differences between algorithms. The list of recognized forest types, groupings of these forest types for reporting purposes, models used to assign stocking values to individual trees, definition of nonstocked (stands with a stocking value of less than 10 percent for live trees), and names given to the forest types changed with the new algorithms. Consequently, comparisons between the published 2005 results and those published for the 1998 inventory may be invalid. Contact NRS-FIA for additional information on the algorithms used in both inventories.

Plot Configuration

The national FIA plot design consists of four 24-foot-radius subplots (1/24th acre) configured as a central subplot and three peripheral subplots (Fig. 1). Centers of the peripheral subplots are located at distances of 120 ft from the central subplot at azimuths of 0, 120, and 240 degrees from the center of the central subplot. Trees with a diameter at breast height (d.b.h.) of 5 inches or greater are measured on these subplots. Each subplot contains a 6.8-foot-radius microplot (1/300th acre) with center located 12 ft east of the subplot center on which each tree with d.b.h. between 1 and 5 inches is measured. Forest conditions that occur on any of the four subplots are identified and recorded. If the area of the condition is 1 acre or greater, the condition is mapped on the subplot. Factors that differentiate forest conditions include forest type, stand-size class, stand origin, land use, ownership, and density. Macroplots (shown in Fig. 1) are not used by NRS-FIA.

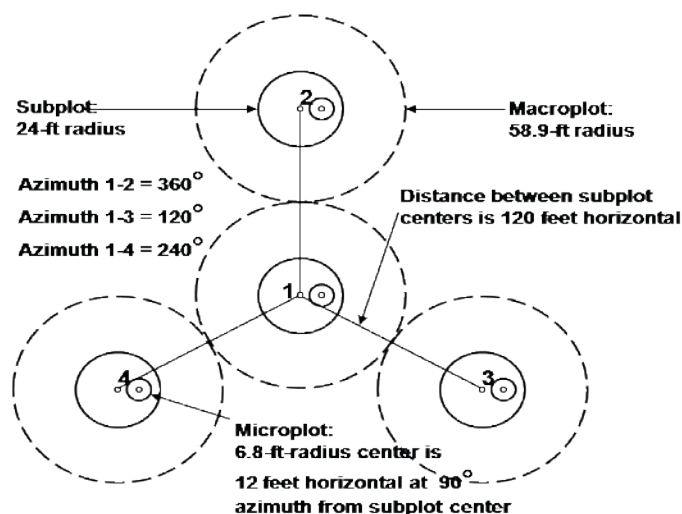


Figure 1.—Current NRS-FIA field-plot design.

Sample Design

On the basis of historical sampling errors, a sampling intensity of about one plot per 6,000 acres is required to satisfy national FIA precision guidelines. Therefore, FIA divided the area of the United States into nonoverlapping, 5,937-acre hexagons and established a plot in each hexagon as follows: (1) if an existing FHM plot was located in a hexagon, it was selected; (2) if no FHM plot existed in the hexagon, the existing FIA plot from the previous periodic inventory nearest the hexagon center was selected; and (3) if neither an FHM nor FIA plot was located in the hexagon, a new FIA plot was established at a random location in the hexagon (Brand et al. 2000, McRoberts 1999). This array of field plots is designated the Federal base sample and is considered an equal probability sample; its measurement is funded by the Federal government.

The Federal base sample was systematically divided into five interpenetrating, nonoverlapping panels or subsamples, each of which provides complete, systematic coverage of a state. Each year, the plots in a single panel are measured, and panels are selected on a 5-year, rotating basis (McRoberts 1999). For estimation purposes, the measurement of each panel of plots is considered an independent, equal probability sample of all lands in a state.

Three-phase Inventory

FIA conducts inventories in three phases. Phase 1 uses remotely sensed data to obtain initial plot land cover observations and to stratify land area in the population of interest to increase the precision of estimates. In Phase 2, field crews visit the physical locations of permanent field plots to measure traditional inventory variables such as tree species, diameter, and height. In Phase 3, field crews visit a subset of Phase 2 plots to obtain measurements for an additional suite of variables associated with forest and ecosystem health. The three phases of the enhanced FIA program are discussed in greater detail in the sections that follow.

Phase 1

Aerial photographs, digital orthoquads (DOQs: digitally scanned aerial photographs), and satellite imagery are used for initial plot measurement via remotely sensed data and stratification. Phase 1 plot measurement consists of observations of conditions at the plot locations using aerial photographs or DOQs. Analysts determine a digitized geographic location for each field plot, and a human interpreter assigns the plot a land cover/use with the primary focus on identifying forest land.¹ All plot locations that could possibly contain accessible forest land are selected for further measurement via field crew visits during Phase 2.

The combination of natural variability among plots and budgetary constraints prohibits measurement of a sufficient number of plots to satisfy national precision standards for most inventory variables unless the estimation process is enhanced using ancillary data. Thus, the land area is stratified by using remotely sensed data to facilitate stratified estimation.

¹Lands satisfying FIA's definition of forest land include commercial timberland, some pastured land with trees, forest plantations, unproductive forested land, and reserved, noncommercial forested land. Forest land requires minimum stocking levels, a 1-acre minimum area, and a minimum bole-to-bole width of 120 ft with continuous canopy. Forest land excludes wooded strips and windbreaks less than 120 ft wide, idle farmland or other previously nonforest land that is below minimum stocking levels.

A stratification scheme based on satellite imagery as proposed by Hansen and Wendt (2000) is applied to the National Land Cover Data (NLCD) as suggested by McRoberts et al. (2002). The NLCD is a digital land cover map of the conterminous United States in which 30-meter x 30-meter pixels are assigned to 21 land cover classes. The land cover classification was produced by the U.S. Geological Survey and was based on nominal 1992 Landsat 5 Thematic Mapper (TM) satellite imagery and a variety of ancillary data (Vogelmann et al. 2001). Four strata are created using a three-step process: 1) aggregate the NLCD classes with trees into a forest stratum with remaining classes in a nonforest stratum; 2) reclassify isolated groups of three or fewer pixels into their surrounding forest or nonforest class to comply with the FIA criterion that forest land must be at least 1 acre; and 3) create two additional classes (forest edge and nonforest edge) that includes all pixels within two pixels of the forest/nonforest boundary.

In addition to classifying every pixel into one of the four strata, FIA assigns every pixel to an ownership strata based on the Protected Areas Database (PAD) described by DellaSala et al. (2001). In Illinois, the PAD was used to classify pixels into three ownership classes: 1) national forest; 2) other public owners; and 3) private owners. Each pixel was also assigned to a county based on the location of the pixel center.

Stratified estimation requires that two tasks be accomplished. First, each plot must be assigned to a single stratum. Second, the proportion of the estimation unit in each stratum must be calculated. The first task is accomplished by assigning each plot to the stratum assigned for the pixel containing the center of the center subplot. The second task is accomplished by calculating the proportion of pixels in each stratum. The population estimate for a variable is calculated as the sum across all strata of the product of each stratum's observed proportion (from Phase 1) and the variable's estimated mean per unit area for the stratum (from Phase 2). Details of the stratum assignments used in Illinois are presented in the estimation section of this report.

Phase 2

In Phase 2, field crews record a variety of data for plot locations determined in Phase 1 to include accessible forest land. Before visiting plot locations, field crews consult county land records to determine the ownership of plots and then seek permission from private landowners to measure plots on their lands. Field crews determine the location of the geographic center of the center subplot using geographic positioning system (GPS) receivers. They record condition-level observations that include land cover, forest type, stand origin, stand age, stand-size class, site productivity class, forest disturbance history, slope, aspect, physiographic class, and ground land use conditions. For each tree, field crews record a variety of observations and measurements including species, live/dead status, lean, diameter, height, crown ratio (percent of tree height represented by crown), crown class (e.g., dominant, codominant, suppressed), damage, and decay status. Office staff use statistical models based on field crew measurements to calculate values for additional variables including individual tree volume, per unit area estimates of number of trees, volume, and biomass by subplot, by species groups, and by live/dead status. Additional details on data collection procedures used in Phase 2 of this inventory are available at <http://www.nrs.fs.fed.us/fia/data-collection/>.

Phase 3

The third phase of the enhanced FIA program focuses on forest health. Phase 3 is administered cooperatively by the FIA program, other Forest Service programs, other Federal agencies, State natural resource agencies, and universities, and it is partially integrated with the Forest Health Monitoring (FHM) program. The FHM program consists of four interrelated and complementary activities: detection monitoring, evaluation monitoring, intensive site ecosystem monitoring, and research on monitoring techniques. Detection monitoring consists of systematic aerial and ground surveys designed to collect baseline information on the current condition of forest ecosystems and to detect changes from those baselines over time. Evaluation monitoring studies examine the extent, severity, and probable causes of changes in forest health identified through the detection monitoring surveys.

The intensive site ecosystem monitoring program conducts research into regionally specific ecological processes at a network of sites located in representative forested ecosystems. Finally, research on monitoring techniques focuses on developing and refining indicator measurements to improve the efficiency and reliability of data collection and analysis at all levels of the program.

The ground survey portion of the FHM detection monitoring program was integrated into the FIA program as Phase 3 in 1999. The Phase 3 sample consists of a 1:16 subset of the Phase 2 plots with one Phase 3 plot for approximately every 96,000 acres. Phase 3 measurements are obtained by field crews during the growing season and include an extended suite of ecological data: lichen diversity and abundance, soil quality (erosion, compaction, and chemistry), vegetation diversity and structure, and down woody material. The incidence and severity of ozone injury for selected bioindicator species also are monitored as part of an associated sampling scheme. Because each Phase 3 plot is also a Phase 2 plot, the entire suite of Phase 2 measurements is collected on each Phase 3 plot at the same time as the Phase 3 measurements. Details regarding the data collection procedures used in Phase 3 of this inventory are available at <http://www.nrs.fs.fed.us/fia/topics/>.

Phase 3 variables were selected to address specific criteria outlined by the Montreal Process working group (Montreal Process 1999) for the conservation and sustainable management of temperate and boreal forests and are based on the concept of indicator variables. Observations of an indicator variable represent an index of ecosystem functions that can be monitored over time to assess trends. Indicator variables are used in conjunction with each other, Phase 2 data, data from FHM evaluation monitoring studies, and ancillary data to address ecological issues such as vegetation diversity, fuel loading, regional air quality gradients, and carbon storage. The Phase 2 and Phase 3 data of the enhanced FIA program serve as the Nation's environmental report card and are a primary source of reporting data for the Montreal Process Criteria and Indicators (for more information see Woodall et al. 2011).

Estimation

Most of the estimates and analysis presented in this report (including all the estimate tables) are based on averages observed on 6,107 Phase 2 plots located across Illinois (Fig. 2). The analysis of forest health issues that relate to down woody material, soils, ozone, and crown conditions are based on data observed on the 397 Phase 3 plots (Fig. 3). In 2004 and 2005, additional support from the Shawnee National Forest tripled the intensity of the sample on National Forest land and a total of 56 plots were measured during these years.

About 20 percent of the Phase 2 observations were acquired each year January 15, 2001 through September 21, 2005. These observations, collectively called the 2005 inventory, are within 10 estimation strata (Table A) defined by combinations of the four Phase 1 classes: (1) nonforest, (2) nonforest edge, (3) forest, and (4) forest edge, a land ownership classification created from the PAD, and inventory unit. Nationally consistent algorithms were used to assign forest type and stand-size class to each

condition observed on a plot. For NRS-FIA, panels are measured on an annual basis so that five panel estimates are equivalent to 5-year moving average estimates. Field plot measurements are combined with Phase 1 estimates in the compilation process and table production. Procedures described in Bechtold and Patterson (2005) for stratified estimation with observed stratum areas were used in conjunction with the strata presented in Table A to produce all estimates. Table A shows the total area and number of plots within each stratum.

Integration with Previous Inventories

In 2005, NRS-FIA completed measurement of the fifth panel of inventory plots in Illinois. The 2005 panel, along with those surveyed in 2001, 2002, 2003, and 2004, completed data collection for the fifth inventory of Illinois' forests. Previous inventories of Illinois' forest resources were completed in 1948 (Central States Forest Experiment Station 1949), 1962 (Essex and Gansner 1965), 1985 (Raile and Leatherberry 1988), and 1998 (Schmidt et al. 2000).

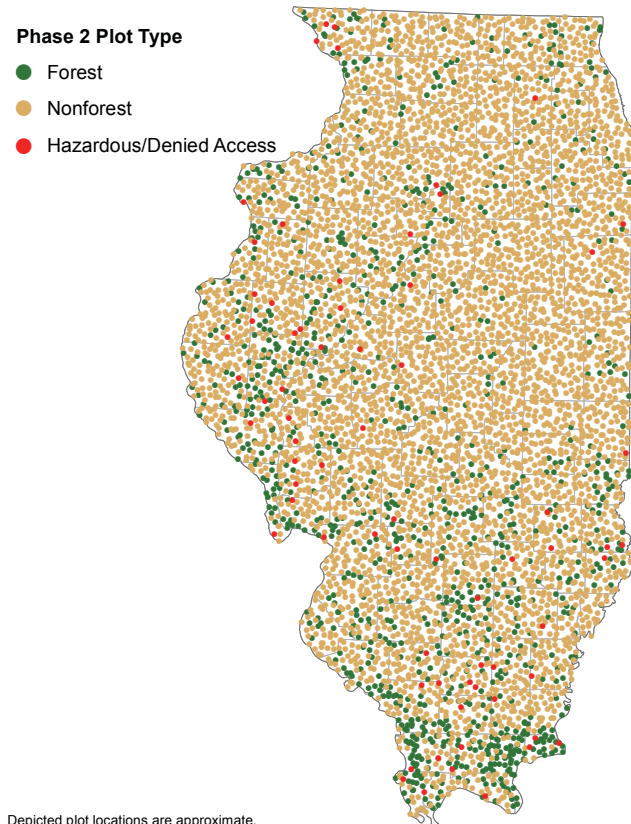


Figure 2.—Approximate location of Phase 2 plots, Illinois, 2005.

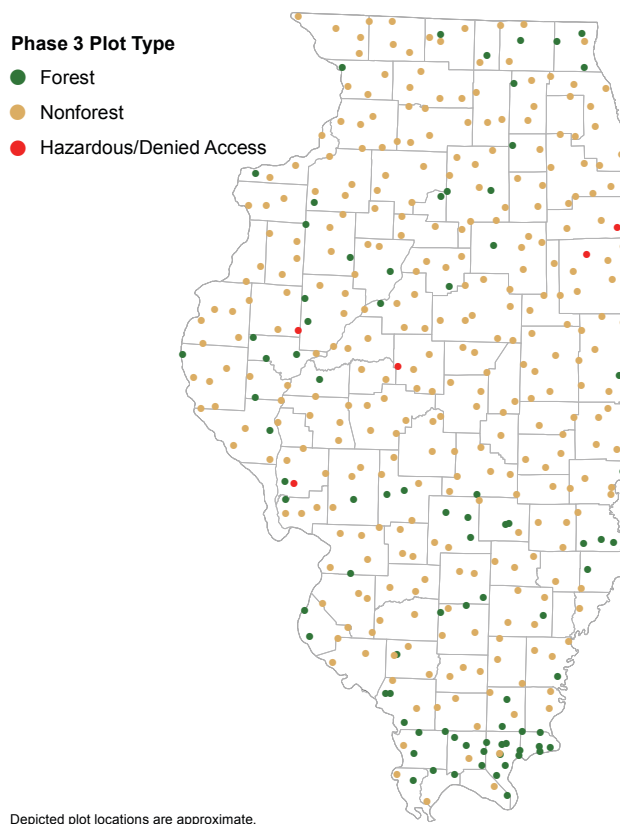


Figure 3.—Approximate location of Phase 3 plots, Illinois, 2005.

Data from new inventories is often compared with data from earlier inventories to determine trends in forest resources. However, for the comparisons to be valid, the procedures used in the two inventories must be similar. To improve the efficiency and reliability of the inventory, several changes in procedures and definitions have been made since the last Illinois inventory in 1998 (Schmidt et al. 2000). Although these changes will have little impact on statewide estimates of forest area, timber volume, and tree biomass, they may significantly impact plot classification variables such as forest type and stand-size class. For estimating growth, removals, and mortality, the 2005 inventory (Schmidt et al. 2000) was processed using national estimation/summary routines that differ from the regional methods used in the 1998 inventory. Because these changes allow limited comparison of inventory estimates among separate inventories in this report, it is inappropriate to directly compare all portions of the 2005 data with those published for earlier inventories.

For further information about the sample protocols and estimation procedures for the first two phases of the FIA program, please see Bechtold and Patterson (2005). For more information on Phase 3 indicator sampling protocols, please see U.S. For. Serv. (2003).

QUALITY OF THE ESTIMATES

The four primary sources of error common to all sample-based estimates are sampling, measurement, prediction, and nonresponse error. For each of these sources of error, a definition within the context of the FIA inventory is provided along with a discussion of methods used to quantify and reduce this error.

Sampling Error

The process of sampling (selecting a random subset of a population and calculating estimates from this subset) causes estimates to contain error they would not have if every member of the population had been observed and included in the sample. The 2005 inventory of Illinois is based on a sample of 6,107 plots located randomly across the State (a total area of approximately 36 million acres), a sampling rate of approximately one plot for every 5,939 acres.

The statistical estimation procedures outlined in the previous section and described in detail in Bechtold and Patterson (2005) provide the estimates of the population totals and means presented in this report. Along with every estimate is an associated sampling error that is typically expressed as a percentage of the estimated value but that can also be expressed in the same units as the estimate or as a confidence interval (the estimated value plus or minus the sampling error). This sampling error is the primary measure of the reliability of an estimate. A sampling error can be interpreted to mean that the chances are two out of three that had a 100-percent inventory been taken using these methods, the results would have been within the limits indicated (i.e., 68-percent confidence interval).

The sampling errors for State-level estimates of the major attributes presented in this report are shown in Table B. Table IL-65 presents sampling errors for these estimates at the inventory unit and county group levels.

Estimates for classifications smaller than the State totals presented in Table B will have larger sampling errors. For example, Table IL-65 shows that the sampling error for timberland area in any county is higher than that for total timberland area in the State. To compute an approximate sampling error for an estimate that is smaller than a State total, use the following formula:

$$E = \frac{(SE)\sqrt{(\text{State total estimate})}}{\sqrt{(\text{Smaller estimate})}} \quad (1)$$

where:

E = approximate sampling error for smaller estimate

SE = sampling error for State total estimate

For example, to compute the error on the area of U.S. Fish and Wildlife Service (FWS) forest land in the State, proceed as follows:

The total FWS forest land in the State from Table IL-2 is estimated at 50,700 acres.

The total area of all forest land in the state from Table IL-2 is 4,525,300 acres.

The State total error for forest land area from Table B is 1.87 percent.

Using formula (1):

$$\text{Sampling error} = E = \frac{(1.87)\sqrt{(4,525,300)}}{\sqrt{(50,700)}} = 17.67 \text{ percent.}$$

This approximation works well for estimates of area, volume, number of trees, and biomass. It is less effective for estimates of growth, removals, or mortality. Individuals seeking more accurate sampling errors should use estimation tools available at <http://www.fia.fs.fed.us/tools-data/>.

The estimators used by FIA are unbiased under the assumptions that the sample plots are a random sample of the total population and the observed value for any plot is the true value for that plot. Deviations from these basic assumptions are not reflected in the computation of sampling errors. The following sections on measurement, prediction, and nonresponse error address possible departures from these basic assumptions.

Measurement Error

Errors associated with the methods and instruments used to observe and record the sample attributes are called measurement errors. On FIA plots, attributes such as the diameter and height of a tree are measured with different instruments, and other attributes such as species and crown class are observed without the aid of an instrument. On a typical FIA plot, 30 to 70 trees are observed with 15 to 20 attributes recorded on each tree. In addition, many attributes that describe the plot and conditions on the plot are observed. Errors in any of these observations affect the quality of the estimates. If a measurement is biased (such as tree diameter consistently taken at an incorrect place on the tree), then the estimates that use this observation (such as volume) will reflect this bias. Even if measurements are unbiased, high levels of random error in the measurements will add to the total random error of the estimation process.

To ensure that all FIA observations are made to the highest standards possible, a regular program of quality assurance and quality control is an integral part of all FIA data collection efforts. This program begins with the documentation of protocols and procedures used in the inventory followed by intensive crew training. To

assess the quality of the data collected by these trained crews, a random sample of at least 4 percent of all plots are measured independently by a different expert crew. These independent measurements are referred to as blind checks. The purpose of these blind checks is to assess the quality of field measurements. The second measurement on these blind check plots is done by a crew termed the QA crew. In all cases, QA crews have as much or more experience and training in FIA field measurements than standard FIA crews.

The quality of field measurements is assessed nationally through a set of measurement quality objectives (MQOs) that are set for every data item we collect. Each MQO consists of two parts: a tolerance or acceptable level of measurement error, and an objective in terms of the percent of measurements within tolerance. The blind check measurements are used to observe how often individual field crews are meeting these objectives and to assess the overall compliance among all crews. Table C shows the compliance rates for various measurements used to compute the estimates included in this report and in other NRS-FIA reports. The columns labeled Illinois come from blind check measurements of plots used in this report, and the columns labeled All North Central States come from all measurements made by FIA crews within an 11-state area (Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin) where the Northern Research Station implemented the FIA program over 2001-2005. Training and supervision of crews is a regional effort and crews often work in more than one state. Regional data quality observations reflect the overall measurement quality of all data collected by FIA in the NRS region.

In addition to the percent compliance to measurement quality objectives, the blind check observations were used to test for relative bias in the field crew measurements. Relative bias is defined here as a tendency for the standard field crew measurements to be higher or lower than those measurements taken by the QA crews. The estimated relative bias and limits of 95 percent confidence intervals (based on parametric bootstrap estimates) for the relative bias are presented in Table D.

The blind check measurements do not provide direct observations of true bias in field measurements (average difference between field measurements and true values) because they are paired observations of two field measurements. The QA crew in these blind checks typically has more training and experience with FIA field measurements than the first crew, but both crews use the same methods and instruments to obtain the measurements. These methods have been selected to be the best available and were selected for use nationwide by FIA; they are commonly used by other similar natural resource inventories. A basic assumption is that the methods, when correctly applied, provide unbiased observations of the attribute they are designed to measure. Under this assumption, relative bias observations in Table D provide observations of bias due to the difference in experience and training between the field and QA crews. In most cases there is no significant bias.

Prediction Error

Errors associated with using mathematical models (such as volume models) to provide observations of the attributes of interest based on sample attributes are referred to as prediction errors. Area, number of trees, volume, biomass, growth, removals, and mortality are the primary attributes of interest presented in this report. Area and number of trees estimates are based on direct observation and do not involve the use of prediction models; however, FIA estimates of volume, biomass, growth, removals, and mortality use model-based predictions in the estimation process. Models are used to predict volume and biomass estimates of individual tree volumes. Change estimates such as growth, mortality, and removals are based on these model-based predictions of volume from both the current plot measurements and the measurements taken in the previous inventory.

Estimates of prediction errors associated with the volume models used in this report are presented by Hahn and Hansen (1991) along with the model forms, methods used in model development, and model parameter estimates. The estimated prediction errors are based on observations of 10,453 trees measured in the 1989 Missouri statewide inventory. For gross cubic-foot

volume in live trees, an overprediction of 2.5 percent was found across all species, with an underprediction of 4.3 percent in trees less than 10 inches d.b.h. and an overprediction of 7.1 percent in trees 20 inches d.b.h. and larger. Similar prediction errors were observed in the board-foot estimates.

In comparing FIA estimates to other data sources, users need to be aware of the prediction models used in both estimates. If both estimates are based on the same prediction models with matching fitted parameter values, then the prediction bias of one estimate should cancel out that of the other estimate. If the estimates are based on different prediction models, then the user should be aware of the prediction error of both models.

Nonresponse Error

Nonresponse error refers to the error caused by not being able to observe some of the elements in the sample. In FIA, nonresponse occurs when crews are unable to measure a plot (or a portion of a plot) at a selected location. Nonresponse falls into the following three classes:

Denied access—Entire plots or portions of plots where the field crew is unable to obtain permission from the landowner and is therefore unable to measure the trees on the plot.

Hazardous/inaccessible—Entire plots or portions of plots where conditions prevent a crew from safely getting to the plot or measuring the trees on the plot.

Other—Plots where the field crew is unable to obtain a valid measurement for reasons other than those stated above.

Nonresponse has two effects on the sample. First, it reduces the sample size. The reduced sample size is reflected in the sampling errors discussed in that section. Second, nonresponse can bias the estimates if the portion of the population not being sampled differs from the portion being sampled.

In FIA, unlike many survey samples, nonresponse rates are relatively low. In the 2005 Illinois inventory, a total

of 6,107 sample plots were selected to be observed. Ninety-nine percent of selected sample plots were used in the estimation of the current resources. Crews were unable to obtain owner permission for plot measurement on 67 plots, and hazardous conditions were encountered on 4 plots. Even though a nonresponse rate of 1 percent is low, it can cause bias if not properly accounted for. The major source of nonresponse is denied access to plots. Denied access plots primarily occur on lands in private ownership. Also, the observations needed for plots on nonforest and water land classes do not usually require crews to physically enter the land and permission is not needed to obtain the observation because it can be obtained from aerial photos or other remotely sensed information sources.

The stratified estimation process used by FIA with strata defined by three ownership classes (national forest, other public, and private) and four Landsat TM forest-cover classes (nonforest, nonforest edge, forest edge and forest) reduces the possible effects of bias caused by

nonresponse. Under the stratified estimation process used by FIA, nonresponses are removed from the sample, and stratum estimates (means, totals, and sampling errors) are obtained from only those plots with valid observations. The net effect in the estimates of means and totals is that the average of the observed plots within the stratum (ownership class-forest cover class) becomes the estimate for all nonresponses within that stratum. The nonresponse rate in one stratum does not affect the estimate in other strata. The response rate within each stratum is presented in Table E for the Illinois 2005 inventory and for all FIA inventories conducted by the Northern Research Station over the same period.

The nonresponse plots in this inventory were not permanently removed from the FIA system of plots. In future inventories, we will again attempt to measure these plots. At that time we may be able to obtain permission to access these plots, the hazardous conditions may have changed, or other circumstances that caused us to drop plots from a specific inventory cycle may be different.

GLOSSARY

Accretion—The estimated net growth on trees that were measured during the previous inventory (divided by the number of growing seasons between surveys to produce average annual accretion). It does not include growth on trees cut during the period nor those trees that died. This component uses the incremental change in volume between two inventories.

Average annual mortality of growing stock—The average annual change in cubic-foot volume of sound wood in growing-stock trees that died over a defined measurement cycle.

Average annual mortality of sawtimber—The average annual change in board-foot volume of sound wood in sawtimber trees that died over a defined measurement cycle.

Average annual net growth of growing stock—The average annual change in cubic-foot volume of sound wood in live growing-stock trees, and the total volume of trees entering diameter classes greater than 5.0 inches d.b.h., through ingrowth, less volume losses resulting from natural causes. Natural causes include mortality except that due to logging damage, timber stand improvement, or conversion to a nonforest land use.

Average annual net growth of sawtimber—The average annual change in the board-foot volume of live sawtimber trees, and the total volume of trees reaching sawtimber size, less volume losses resulting from natural causes. Natural causes include mortality except that due to logging damage, timber stand improvement, or conversion to a nonforest land use.

Average annual removals from growing stock—The average cubic-foot volume of wood in live growing-stock trees removed annually for roundwood forest products, in addition to the volume in logging residues or mortality due to logging damage (harvest removals). This component of change also includes the volumes of growing-stock trees removed due to land use changes (other removals).

Average annual removals from sawtimber—The average board-foot volume of wood in live sawtimber trees removed annually for roundwood forest products, in addition to the volume of logging residues or mortality due to logging damage (harvest removals). This component of change also includes the volumes of sawtimber trees removed due to land use changes (other removals).

Basal area—The cross-sectional area of a tree stem at breast height, expressed in square feet. When the basal areas of all trees in a stand are summed, the result is usually expressed as square feet of basal area per acre.

Bioindicator species—A tree, woody shrub, or nonwoody herb species that responds to ambient levels of ozone pollution with distinct visible foliar symptoms that are easy to diagnose.

Biomass—The aboveground volume of live trees (including bark but excluding foliage) reported in dry tons (i.e., dry weight). Biomass has four components:

Bole—Biomass of a tree from 1 foot above the ground to a 4-inch top outside bark or to a point where the central stem splits into smaller limbs.

Tops and limbs—Total biomass of a tree from the 1-foot stump minus the bole.

Sapling trees—Total biomass of a tree from 1 to 4.9 inches d.b.h.

Stump—Total biomass of a tree 5 inches d.b.h. and larger from the ground to a height of 1 foot.

Board foot—A unit of lumber measuring 1-foot long, 1-foot wide, and 1-inch thick, or its equivalent. International ¼-Inch Rule is used as the U.S. Forest Service standard log rule in the eastern United States.

Bulk density—The mass of soil per unit of volume. A measure of the ratio of pore space to solid materials in a given soil. It is expressed in units of grams per cubic centimeter of oven dry soil.

Census water—Lakes reservoirs, ponds, and similar bodies of water 4.5 acres in size or larger; and rivers or canals more than 200 feet wide (U.S. Census definition).

Coarse woody debris (CWD)—Dead branches, twigs, and wood splinters 3.0 inches in diameter and larger, measured at the smallest end.

Commercial species—Tree species currently or prospectively suitable for industrial wood products; excludes species of typically small size, poor form, or inferior quality, e.g., hawthorn and sumac.

Compacted live crown ratio—The percent of the total length of the tree that supports a full, live crown. To determine compacted live crown ratio for trees that have uneven length crowns, lower branches are visually transferred to fill holes in the upper portions of the crown, until a full, even crown is created.

Condition—A delineation of a land area based upon land use, forest type, stand size, regeneration status, reserved status, tree density, and owner class.

County and municipal—A class of public lands owned by counties or local public agencies, or lands leased by these governmental units for more than 50 years.

Cropland—Land under cultivation within the last 24 months, including cropland harvested, crop failures, cultivated summer fallow, idle cropland used only for pasture, orchards, active Christmas tree plantations indicated by annual shearing, nurseries, and land in soil improvement crops, but excluding land cultivated in developing improved pasture.

Crown—The part of a tree or woody plant bearing live branches or foliage.

Crown dieback—Recent mortality of branches with fine twigs, which begins at the terminal portion of a branch and proceeds toward the trunk. Dieback is considered only when it occurs in the upper and outer portions of the tree. When whole branches are dead in the upper crown, without obvious signs of damage such as breaks or animal injury, it is assumed the branches died from

the terminal portion of the branch. Dead branches in the lower portion of the live crown are assumed to have died from competition and shading.

Cull decrement—The net volume of rough and rotten cull trees in the previous inventory that are classified as growing-stock trees in the current inventory (divided by the number of growing seasons between inventories to compute average annual cull decrement).

Cull increment—The net volume of growing-stock trees in the previous inventory that are classified as rough and rotten cull trees in the current inventory (divided by the number of growing seasons between inventories to compute average annual cull increment).

Cull tree—A live tree, 5.0 inches in d.b.h. or larger, that is unmerchantable for saw logs now or prospectively because of rot, roughness, or species. (See definitions for rotten and rough trees.)

Diameter-at-breast-height (d.b.h.)—The diameter outside bark of a standing tree measured at 4.5 feet above the ground.

Decay class—Qualitative assessment of stage of decay (five classes) of coarse woody debris based on visual assessments of color of wood, presence/absence of twigs and branches, texture of rotten portions, and structural integrity.

Diameter class—A classification of trees based on diameter outside bark measured at breast height (4-1/2 feet above ground). D.b.h. is the common abbreviation for “diameter at breast height.” With 2-inch diameter classes, the 6-inch class, for example, includes trees 5.0 through 6.9 inches d.b.h.

Dry ton—A unit of measure of dry weight equivalent to 2,000 pounds or 907.1848 kg.

Dry weight—The weight of wood and bark as it would be if it had been oven dried; usually expressed in pounds or tons.

Down woody material (DWM)—Woody pieces of trees and shrubs that have been uprooted (no longer supporting growth) or severed from their root system, not self-supporting, and lying on the ground.

Duff—A soil layer dominated by organic material derived from the decomposition of plant and animal litter and deposited on either an organic or a mineral surface. This layer is distinguished from the litter layer in that the original organic material has undergone sufficient decomposition that the source of this material (e.g., individual plant parts) can no longer be identified.

Effective cation exchange capacity (ECEC)—The sum of cations that a soil can adsorb in its natural pH. Expressed in units of centimoles of positive charge per kilogram of soil.

Federal—An ownership class of public lands owned by the U.S. Government.

Fiber products—Products derived from wood and bark residues, such as pulp, composition board products, and wood chips.

Fine materials—Wood residues not suitable for chipping, such as planer shavings and sawdust.

Fine woody debris (FWD)—Dead branches, twigs, and wood splinters 0.1 to 2.9 inches in diameter.

Forest land—Land at least 10 percent stocked by forest trees of any size, including land that formerly had such tree cover and that will be naturally or artificially regenerated. Forest land includes transition zones, such as areas between heavily forested and nonforested lands that are at least 10 percent stocked with forest trees and forest areas adjacent to urban and builtup lands. Also included are pinyon-juniper and chaparral areas in the West and afforested areas. The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of trees must have a crown width of at least 120 feet to qualify as forest land. Unimproved roads and trails, streams, and clearings in forest areas are classified as forest if less than 120 feet wide.

Forest type—A classification of forest land based on the species presently forming a plurality of the live-tree stocking.

Forest-type group—A combination of forest types that share closely associated species or site requirements and are generally combined for brevity of reporting.

Major eastern forest-type groups—

White-red-jack pine—Forests in which eastern white pine, red pine, or jack pine, singly or in combination, comprise a plurality of the stocking. Common associates include hemlock, aspen, birch, and maple.

Oak-pine—Forests in which hardwoods (usually upland oaks) comprise a plurality of the stocking, but in which pine or eastern redcedar comprises 25-50 percent of the stocking. Common associates include gum, hickory, and yellow-poplar.

Oak-hickory—Forests in which upland oaks or hickory, singly or in combination, comprise a plurality of the stocking except where pines comprise 25-50 percent, in which case the stand is classified as oak-pine. Common associates include yellow-poplar, elm, maple, and black walnut.

Oak-gum-cypress—Bottomland forests in which tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination, comprise a plurality of the stocking except where pines comprise 25-50 percent, in which case the stand is classified as oak-pine. Common associates include cottonwood, willow, ash, elm, hackberry, and maple.

Elm-ash-cottonwood—Forests in which elm, ash, or cottonwood, singly or in combination, comprise a plurality of the stocking. Common associates include willow, sycamore, beech, and maple.

Maple-beech-birch—Forests in which maple, beech, or yellow birch, singly or in combination, comprise a plurality of the stocking. Common associates include hemlock, elm, basswood, and white pine.

Aspen-birch—Forests in which aspen, balsam poplar, paper birch, or gray birch, singly or in combination, comprise a plurality of the stocking. Common associates include maple and balsam fir.

Gross growth—The sum of accretion and ingrowth.

Growing stock—A classification of timber inventory that includes live trees of commercial species meeting specified standards of quality or vigor. Cull trees are excluded. When associated with volume, this includes only trees 5.0 inches d.b.h. and larger.

Growing-stock volume—Net or gross volume in cubic feet of growing-stock trees 5.0 inches and larger d.b.h. measured from the 1-foot stump to a minimum 4.0-inch top diameter outside bark on the central stem, or to the point where the central stem splits into limbs. Net volume equals gross volume minus deduction for cull defects.

Hardwood—A dicotyledonous tree, usually broad-leaved and deciduous.

Soft hardwoods—A category of hardwood species with wood generally of low specific gravity (less than 0.5). Notable examples include red maple, paper birch, quaking aspen, and American elm.

Hard hardwoods—A category of hardwood species with wood generally of high specific gravity (greater than 0.5). Notable examples include sugar maple, yellow birch, black walnut, and oaks.

Industrial wood—All commercial roundwood products except fuelwood.

Ingrowth—The estimated net volume of trees that became 5.0 inches and larger d.b.h. during the period between inventories (divided by the number of growing seasons between surveys to produce average annual ingrowth). Also, the estimated net volume of trees 5.0 inches and larger d.b.h. that are growing on land that was reclassified from noncommercial forest land or nonforest land to timberland.

Introduction—The intentional or unintentional escape, release, dissemination, or placement of a species into an

ecosystem as a result of human activity. “Introduced” is not synonymous and should not be confused with the term “invasive” (USDA definition).

Invasive species—Those species whose introduction does, or is likely to, cause economic or environmental harm or harm to human health. For the purpose of this policy only, a plant species is considered “invasive” only when it occurs on the Federal or State-specific noxious weed list or a list developed by the State-specific Department of Agriculture with their partners and approved by the State Technical Committee which prohibits or cautions its use due to invasive qualities (USDA definition).

Land area—The area of dry land and land temporarily or partly covered by water, such as marshes, swamps, and river flood plains; streams, sloughs, estuaries, and canals less than 200 feet wide; and lakes, reservoirs, and ponds less than 4.5 acres in area.

Land use—A classification of land that indicates the primary use at the time of the inventory. Major categories are forest land and nonforest land.

Litter—Undecomposed or only partially decomposed organic material that can be readily identified (e.g., plant leaves, twigs).

Live cull—A classification that includes live, cull trees. When associated with volume, it is the net volume in live, cull trees that are 5.0 inches d.b.h. and larger.

Logging residues—The unused portions of growing-stock and non-growing-stock trees cut or killed by logging and left in the woods.

Merchantable—Refers to a pulpwood or saw log section that meets pulpwood or saw log specifications, respectively.

National Forest—An ownership class of Federal lands, designated by Executive order or statute as National Forests or purchase units, and other lands under the administration of the Forest Service including experimental areas.

Net cubic-foot volume—The gross volume in cubic feet less deductions for rot, roughness, and poor form. Volume is computed for the central stem from a 1-foot stump to a minimum 4.0-inch top diameter outside bark, or to the point where the central stem breaks into limbs.

Net board-foot volume—The gross volume in board feet less the deductions for rot, roughness, and poor form. Volume is computed from the 1-foot stump to a minimum 7.0-inch diameter outside bark for softwoods and a minimum 9.0-inch outside bark for hardwoods on the central stem. This estimate includes all softwoods 9.0 inches d.b.h. and larger, and all hardwoods 11.0 inches d.b.h. and larger.

Noncensus water—Streams/rivers 120 to 200 feet wide and bodies of water 1 to 4.5 acres in size, where the U.S. Bureau of the Census (1990) classifies such water as land.

Noncommercial species—Tree species of typically small size, poor form, or inferior quality, which normally do not develop into trees suitable for industrial wood products.

Nonforest land—Land that has never supported forests and lands formerly forested where use of timber management is precluded by development for other uses. (Note: Includes area used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining clearings, powerline clearings of any width, and 1- to 4.5-acre areas of water classified by the U.S. Bureau of the Census as land. If intermingled in forest areas, unimproved roads and nonforest strips must be more than 120 feet wide, and clearings, etc., must be more than 1 acre in area to qualify as nonforest land.)

Nonnative species—Within a particular ecosystem, any species; including its seeds, eggs, spores, or other biological material capable of propagating that species; that is not native to that ecosystem (USDA definition).

Nonstocked areas—Timberland less than 10 percent stocked with all live trees.

Ownership unit—A classification of ownership encompassing all types of legal entities having an

ownership interest in land, regardless of the number of people involved. A unit may be an individual; a combination of persons; a legal entity such as a corporation, partnership, club, or trust; or a public agency. An ownership unit has control of a parcel or group of parcels of land.

Owner class—A classification of land into categories of ownership.

Forest industry—Land owned by private companies which operate primary wood-using mills.

Nonindustrial private—Land owned by other corporate, individuals or trusts (NGOs) and whom do not operate primary wood-using mills.

Other corporate—Land owned by timber investment or real estate companies.

Public—Land owned by federal, state, county, or municipal government.

Ozone—O₃. A regional, gaseous air pollutant produced primarily through sunlight-driven chemical reactions of nitrogen dioxide and hydrocarbons in the atmosphere and causing foliar injury to deciduous trees, conifers, shrubs, and herbaceous species.

Ozone bioindicator site—An open area used for ozone injury evaluations on ozone-sensitive species. The area must meet certain site selection guidelines on size, condition, and plant counts to be used for ozone injury evaluations in FIA.

Physiographic class—A measure of soil and water conditions that affect tree growth on a site. The physiographic classes are

Xeric—Very dry soils where excessive drainage seriously limits both growth and species occurrence. These sites are usually on upland and upper half slopes.

Xeromesic—Moderately dry soils where excessive drainage limits growth and species occurrence to some extent. These sites are usually on the lower half slopes.

Mesic—Deep, well drained soils. Growth and species occurrence are limited only by climate.

These include all cove sites and bottomlands along intermittent streams.

Hydromesic—Moderately wet soils where insufficient drainage or infrequent flooding limits growth and species occurrence to some extent.

Hydric—Very wet sites where excess water seriously limits both growth and species occurrence.

Poletimber trees—Live trees at least 5.0 inches in d.b.h. but smaller than sawtimber trees.

Primary wood-using mill—A mill that converts roundwood products into other wood products. Common examples are sawmills that convert saw logs into lumber and pulpmills that convert pulpwood into paper.

Productivity class—A classification of forest land in terms of potential annual cubic-foot volume growth per acre at culmination of mean annual increment in fully stocked natural stands.

Pulpwood—Roundwood, whole-tree chips, or wood residues used for the production of wood pulp.

Reserved forest land—Forest land withdrawn from timber utilization through statute, administrative regulation, or designation without regard to productive status. Examples include national forest wilderness areas, national parks, and national monuments.

Residues—Bark and woody materials that are generated in primary wood-using mills when roundwood products are converted to other products. Examples are slabs, edgings, trimmings, miscuts, sawdust, shavings, veneer cores and clippings, and pulp screenings. Includes bark residues and wood residues (both coarse and fine materials) but excludes logging residues.

Rotten tree—A live tree of commercial species that does not contain a saw log now or prospectively primarily because of rot (that is, when rot accounts for more than 50 percent of the total cull volume).

Rough tree—(a) A live tree of commercial species that does not contain a saw log now or prospectively primarily because of roughness (that is, when sound cull due to such factors as poor form, splits, or cracks accounts for more than 50 percent of the total cull volume); or (b) a live tree of noncommercial species.

Roundwood products—Logs, bolts, and other round timber generated from harvesting trees for industrial or consumer use. Roundwood products include saw logs, veneer, cooperage logs, bolts, pulpwood logs, fuelwood, pilings, poles posts, ties, mine timbers, and various other round or split products.

Salvable dead tree—A downed or standing dead tree considered currently or potentially merchantable by regional standards.

Saplings—Live trees 1.0 inch through 4.9 inches d.b.h.

Saw log—A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight, and with a minimum diameter inside bark of 6 inches for softwoods and 8 inches for hardwoods, or meeting other combinations of size and defect specified by regional standards.

Sawtimber tree—A live tree of commercial species containing at least a 12-foot saw log or two noncontiguous saw logs 8 feet or longer, and meeting regional specifications for freedom from defect. Softwoods must be at least 9.0 inches d.b.h. Hardwoods must be at least 11.0 inches diameter outside bark (d.o.b.).

Sawtimber volume—Net or gross volume in board-foot (International ¼-Inch Rule) or cubic-foot of the saw log portion of live sawtimber trees measured from the 1-foot stump to a minimum 7.0-inches top diameter outside bark (for softwoods) or 9.0 inches top diameter outside bark (for hardwoods), on the central stem, or to the point where the central stem splits into smaller limbs. Net volume equals gross volume minus deduction for rough and rotten cull.

Seedling—Live tree smaller than 1.0 inch d.b.h./d.r.c. and at least 6.0 inches in height for softwoods and 12.0 inches in height for hardwoods.

Site index—An expression of forest site quality based on the height of a free-growing dominant or codominant tree of a representative species in the forest type at age 50.

Snag—A standing dead tree. In the current inventory, a snag must be 5.0 inches d.b.h./d.r.c. and 4.5 feet tall, and have a lean angle less than 45 degrees from vertical. A snag may be either self-supported by its roots or supported by another tree or snag.

Softwood—A coniferous tree, usually evergreen, having needles or scale-like leaves.

Sound dead—The net volume in salvable dead trees.

Species group—A combination of tree species that share closely associated understory plants or site requirements are combined into species groups.

Stand—A group of trees on a minimum of 1 acre of forest land that is stocked by forest trees of any size.

Standing dead tree—A standing dead tree must be at least 5 inches d.b.h. and larger; is at least 4.5 feet in height; and has a lean of less than 45 degrees from the vertical. A snag should be self-supported or supported by another tree.

Stand-size class—A classification of forest land based on the size class of live trees in the area. The classes include

Nonstocked—Forest land stocked with less than 10 percent of full stocking with live trees. Examples are recently cutover areas or recently reverted agricultural fields.

Sapling-seedling—Forest land stocked with at least 10 percent of full stocking with live trees with half or more of such stocking in seedlings or saplings or both.

Poletimber—Forest land stocked with at least 10 percent of full stocking with live trees with half or

more of such stocking in poletimber or sawtimber trees or both, and in which the stocking of poletimber exceeds that of sawtimber.

Sawtimber—Forest land stocked with at least 10 percent of full stocking with live trees with half or more of such stocking in poletimber or sawtimber trees or both, and in which the stocking of sawtimber is at least equal to that of poletimber.

State—An ownership class of public lands owned by states or lands leased by states for more than 50 years.

Stocking—The degree of occupancy of land by trees, measured by basal area or number of trees by size and spacing, or both, compared to a stocking standard; that is, the basal area or number of trees, or both, required to fully utilize the growth potential of the land.

Stocking class—At the tree level, stocking is the density expressed as a percent of total tree density required to fully utilize the growth potential of the land. At the stand level it is expressed as the sum of the stocking values of all trees sampled. The classes include:

Overstocked—Forest stand with stocking ≥ 100 percent

Fully stocked—Forest stand that contains 60-99 percent of full stocking

Moderately stocked—Forest stand that contains 35-59 percent of full stocking

Poorly stocked—Forest stand that contains only 10-34 percent of full stocking

Nonstocked—Forest stand with less than 10 percent of full stocking.

Timberland—Forest land that is producing or is capable of producing crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation. (Note—Areas qualifying as timberland are capable of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands. Currently inaccessible and inoperable areas are included.)

Timber products output—All timber products cut from roundwood and byproducts of wood manufacturing plants. Roundwood products include logs, bolts, or other round sections cut from growing-stock trees, cull trees, salvable dead trees, trees on nonforest land, noncommercial species, sapling-size trees, and limbwood. Byproducts from primary manufacturing plants include slabs, edging, trimmings, miscuts, sawdust, shavings, veneer cores and clippings, and screenings of pulpmills that are used as pulpwood chips or other products.

Tree—A woody plant usually having one or more erect perennial stems, a stem diameter at breast height of at least 3 inches, a more or less definitely formed crown of foliage, and a height of at least 15 feet at maturity.

Tree size class—A classification of trees based on diameter at breast height, including sawtimber trees, poletimber trees, saplings, and seedlings.

Tops—The wood of a tree above the merchantable height (or above the point on the stem 4.0 inches diameter outside bark (d.o.b.) or to the point where the central stem breaks into limbs). It includes the usable material in the uppermost stem.

Urban forest land—Land that would otherwise meet the criteria for timberland but is in an urban-suburban area surrounded by commercial, industrial, or residential development and not likely to be managed for the production of industrial wood products on a continuing basis. Wood removed would be for land clearing, fuelwood, or esthetic purposes. Such forest land may be associated with industrial, commercial, residential subdivision, industrial parks, golf course perimeters, airport buffer strips, and public urban parks that qualify as forest land.

Unreserved forest land—Forest land not withdrawn from harvest by statute or administrative regulation. Includes forest lands that are not capable of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands.

Veneer log—A roundwood product from which veneer is sliced or sawn and that usually meets certain standards of minimum diameter and length and maximum defect.

Weight—The weight of wood and bark, oven-dry basis (approximately 12 percent moisture content).

APPENDIX A

Tree species measured on field plots in Illinois' 2005 Inventory

Black maple	<i>Acer</i>	<i>nigrum</i>
Boxelder	<i>Acer</i>	<i>negundo</i>
Red maple	<i>Acer</i>	<i>rubrum</i>
Silver maple	<i>Acer</i>	<i>saccharinum</i>
Sugar maple	<i>Acer</i>	<i>saccharum</i>
Ohio buckeye	<i>Aesculus</i>	<i>glauca</i>
Ailanthus	<i>Ailanthus</i>	<i>altissima</i>
Mimosa/silktree	<i>Albizia</i>	<i>julibrissin</i>
Common serviceberry	<i>Amelanchier</i>	<i>arborea</i>
Serviceberry spp.	<i>Amelanchier</i>	<i>spp.</i>
Pawpaw	<i>Asimina</i>	<i>triloba</i>
River birch	<i>Betula</i>	<i>nigra</i>
Yellow birch	<i>Betula</i>	<i>alleghaniensis</i>
American hornbeam, musclewood	<i>Carpinus</i>	<i>caroliniana</i>
Bitternut hickory	<i>Carya</i>	<i>cordiformis</i>
Black hickory	<i>Carya</i>	<i>texana</i>
Hickory spp.	<i>Carya</i>	<i>spp.</i>
Mockernut hickory	<i>Carya</i>	<i>alba</i>
Pecan	<i>Carya</i>	<i>illinoensis</i>
Pignut hickory	<i>Carya</i>	<i>glabra</i>
Shagbark hickory	<i>Carya</i>	<i>ovata</i>
Shellbark hickory	<i>Carya</i>	<i>laciniosa</i>
Water hickory	<i>Carya</i>	<i>aquatica</i>
Northern catalpa	<i>Catalpa</i>	<i>speciosa</i>
Hackberry	<i>Celtis</i>	<i>occidentalis</i>
Sugarberry	<i>Celtis</i>	<i>laevigata</i>
Eastern redbud	<i>Cercis</i>	<i>canadensis</i>
Flowering dogwood	<i>Cornus</i>	<i>florida</i>
Cockspur hawthorn	<i>Crataegus</i>	<i>crus-galli</i>
Downy hawthorn	<i>Crataegus</i>	<i>mollis</i>
Hawthorn spp.	<i>Crataegus</i>	<i>spp.</i>
Common persimmon	<i>Diospyros</i>	<i>virginiana</i>
Russian-olive	<i>Elaeagnus</i>	<i>angustifolia</i>
American beech	<i>Fagus</i>	<i>grandifolia</i>
Black ash	<i>Fraxinus</i>	<i>nigra</i>
Green ash	<i>Fraxinus</i>	<i>pennsylvanica</i>
Pumpkin ash	<i>Fraxinus</i>	<i>profunda</i>
White ash	<i>Fraxinus</i>	<i>americana</i>
Honeylocust	<i>Gleditsia</i>	<i>triacanthos</i>
Kentucky coffeetree	<i>Gymnocladus</i>	<i>dioicus</i>
Black walnut	<i>Juglans</i>	<i>nigra</i>

Tree species measured on field plots in Illinois' 2005 Inventory

Butternut	<i>Juglans</i>	<i>cinerea</i>
Eastern redcedar	<i>Juniperus</i>	<i>virginiana</i>
Tamarack	<i>Larix</i>	<i>laricina</i>
Sweetgum	<i>Liquidambar</i>	<i>styraciflua</i>
Yellow-poplar	<i>Liriodendron</i>	<i>tulipifera</i>
Osage-orange	<i>Maclura</i>	<i>pomifera</i>
Cucumbertree magnolia	<i>Magnolia</i>	<i>acuminata</i>
Apple spp.	<i>Malus</i>	<i>spp.</i>
Mulberry spp.	<i>Morus</i>	<i>spp.</i>
Red mulberry	<i>Morus</i>	<i>rubra</i>
White mulberry	<i>Morus</i>	<i>alba</i>
Blackgum	<i>Nyssa</i>	<i>sylvatica</i>
Water tupelo	<i>Nyssa</i>	<i>aquatica</i>
Eastern hophornbeam	<i>Ostrya</i>	<i>virginiana</i>
Blue spruce	<i>Picea</i>	<i>pungens</i>
White spruce	<i>Picea</i>	<i>glauca</i>
Eastern white pine	<i>Pinus</i>	<i>strobus</i>
Scotch pine	<i>Pinus</i>	<i>sylvestris</i>
Jack pine	<i>Pinus</i>	<i>banksiana</i>
Loblolly pine	<i>Pinus</i>	<i>taeda</i>
Red pine	<i>Pinus</i>	<i>resinosa</i>
Shortleaf pine	<i>Pinus</i>	<i>echinata</i>
American sycamore	<i>Platanus</i>	<i>occidentalis</i>
Balsam poplar	<i>Populus</i>	<i>balsamifera</i>
Bigtooth aspen	<i>Populus</i>	<i>grandidentata</i>
Eastern cottonwood	<i>Populus</i>	<i>deltoides</i>
Quaking aspen	<i>Populus</i>	<i>tremuloides</i>
Swamp cottonwood	<i>Populus</i>	<i>heterophylla</i>
Black cherry	<i>Prunus</i>	<i>serotina</i>
Cherry and plum spp.	<i>Prunus</i>	<i>spp.</i>
Chokecherry	<i>Prunus</i>	<i>virginiana</i>
Wild plum	<i>Prunus</i>	<i>americana</i>
Black oak	<i>Quercus</i>	<i>velutina</i>
Blackjack oak	<i>Quercus</i>	<i>marilandica</i>
Bur oak	<i>Quercus</i>	<i>macrocarpa</i>
Cherrybark oak	<i>Quercus</i>	<i>pagoda</i>
Chinkapin oak	<i>Quercus</i>	<i>muehlenbergii</i>
Northern pin oak	<i>Quercus</i>	<i>ellipsoidalis</i>
Northern red oak	<i>Quercus</i>	<i>rubra</i>
Overcup oak	<i>Quercus</i>	<i>lyrata</i>
Pin oak	<i>Quercus</i>	<i>palustris</i>
Post oak	<i>Quercus</i>	<i>stellata</i>

Tree species measured on field plots in Illinois' 2005 Inventory

Scarlet oak	<i>Quercus</i>	<i>coccinea</i>
Shingle oak	<i>Quercus</i>	<i>imbricaria</i>
Shumard oak	<i>Quercus</i>	<i>shumardii</i>
Southern red oak	<i>Quercus</i>	<i>falcata</i>
Swamp white oak	<i>Quercus</i>	<i>bicolor</i>
White oak	<i>Quercus</i>	<i>alba</i>
Willow oak	<i>Quercus</i>	<i>phellos</i>
Black locust	<i>Robinia</i>	<i>pseudoacacia</i>
Black willow	<i>Salix</i>	<i>nigra</i>
Peachleaf willow	<i>Salix</i>	<i>amygdaloides</i>
Sassafras	<i>Sassafras</i>	<i>albidum</i>
Baldcypress	<i>Taxodium</i>	<i>distichum</i>
American basswood	<i>Tilia</i>	<i>americana</i>
American elm	<i>Ulmus</i>	<i>americana</i>
Rock elm	<i>Ulmus</i>	<i>thomasii</i>
Siberian elm	<i>Ulmus</i>	<i>pumila</i>
Slippery elm	<i>Ulmus</i>	<i>rubra</i>
Winged elm	<i>Ulmus</i>	<i>alata</i>

SAMPLING TABLE CAPTIONS

Table A.—Area and number of plots in each stratum used for stratification and estimation in Illinois, 2005

Table B.—State-level estimates of major forest resource attributes and their sampling errors, Illinois, 2005

Table C.—Compliance to measurement quality objectives (MQO) tolerances of variables based on blind check plots, Illinois, 2005

Table D.—Observed relative bias values (Average [Field crew – QA crew]) for measurement variables, blind check plots, Illinois, 2005

Table E.—FIA nonresponse by strata for selected inventories, Illinois, 2005

LIST OF TABLES

Area

Table IL-1.—Percentage of area by land status, Illinois, 2005

Table IL-2.—Area of forest land, in thousand acres, by owner class and forest land status, Illinois, 2005

Table IL-3.—Area of forest land, in thousand acres, by forest-type group and productivity class, Illinois, 2005

Table IL-4.—Area of forest land, in thousand acres, by forest-type group, ownership group, and land status, Illinois, 2005

Table IL-5.—Area of forest land, in thousand acres, by forest-type group and stand-size class, Illinois, 2005

Table IL-6.—Area of forest land, in thousand acres, by forest-type group and stand-age class, Illinois, 2005

Table IL-7.—Area of forest land, in thousand acres, by forest-type group and stand origin, Illinois, 2005

Table IL-8.—Area of forest land, in thousand acres, by forest-type group and disturbance class, Illinois, 2005

Table IL-9.—Area of timberland, in thousand acres, by forest-type group and stand-size class, Illinois, 2005

Number

Table IL-10.—Number of live trees (at least 1 inch d.b.h./d.r.c.) in thousand trees, on forest land by species group and diameter class, Illinois, 2005

Table IL-11.—Number of growing-stock trees (at least 1 inch d.b.h./d.r.c.) in thousand trees, on timberland by species group and diameter class, Illinois, 2005

Volume

Table IL-12.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, by owner class and forest land status, Illinois, 2005

Table IL-13.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on forest land by forest-type group and stand-size class, Illinois, 2005

Table IL-14.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on forest land by species group and ownership group, Illinois, 2005

Table IL-15.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on forest land by species group and diameter class, Illinois, 2005

Table IL-16.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on forest land by forest type group and stand origin, Illinois, 2005

Table IL-17.—Net volume of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and diameter class, Illinois, 2005

Table IL-18.—Net volume of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and ownership group, Illinois, 2005

Table IL-19.—Net volume of sawtimber trees, in million board feet (International 1/4-inch rule), on timberland by species group and diameter class, Illinois, 2005

Table IL-19a.—Net volume of sawtimber trees, in million board feet (Doyle rule) on timberland by species group and diameter class, Illinois, 2005

Table IL-20.—Net volume of sawtimber trees, in million cubic feet, on timberland by species group and ownership group, Illinois, 2005

Growth, Mortality, and Removals

Table IL-24.—Average annual net growth of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and ownership group, Illinois, 2005

Table IL-28.—Average annual mortality of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and ownership group, Illinois, 2005

Table IL-30.—Average annual removals of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and ownership group, 2005

Weight

Table IL-31.—Aboveground dry weight of live trees (at least 1 inch d.b.h./d.r.c.) in thousand dry short tons, by owner class and forest land status, Illinois, 2005

Table IL-32.—Aboveground dry weight of live trees (at least 1 inch d.b.h./d.r.c.) in thousand dry short tons, on forest land by species group and diameter class, Illinois, 2005

County-Level

Table IL-54.—Area of forest land, in thousand acres, by inventory unit, county, and forest land status, Illinois, 2005

Table IL-55.—Area of forest land, in thousand acres, by inventory unit, county, ownership group, and forest-land status, Illinois, 2005

Table IL-56a.—Area of forest land, in thousand acres, by inventory unit, county, and forest-type group, Illinois, 2005

Table IL-57.—Area of timberland, in thousand acres, by inventory unit, county, and stand-size class, Illinois, 2005

Table IL-58.—Area of timberland, in thousand acres, by inventory unit, county, and stocking class, Illinois, 2005

Table IL-59.—Net volume of growing-stock trees (at least 5 inches d.b.h.), in million cubic feet, and sawtimber trees, in million board feet (International 1/4-rule) trees on timberland by inventory unit, county, and major species group, Illinois, 2005

Table IL-59a.—Net volume of growing-stock trees (at least 5 inches d.b.h.), in million cubic feet, and sawtimber trees, in million board feet (Doyle rule) on timberland by inventory unit, county, and major species group, Illinois, 2005

Table IL-60.—Average annual net growth of growing-stock trees (at least 5 inches d.b.h.), in million cubic feet, and sawtimber trees, in million board feet (International 1/4-rule) on timberland by inventory unit, county, and major species group, Illinois, 2005

Table IL-60a.—Average annual net growth of growing stock trees (at least 5 inches d.b.h.), in million cubic feet, and sawtimber, in million board feet (Doyle rule) on timberland by inventory unit, county, and major species group, Illinois, 2005

Table IL-61.—Average annual removals of growing stock trees (at least 5 inches d.b.h.) in million board feet, and sawtimber trees, in million board feet (International 1/4-rule) on timberland by inventory unit, county, and major species group, Illinois, 2005

Table IL-61a.—Average annual removals of growing stock trees (at least 5 inches d.b.h.) in million board feet, and sawtimber trees, in million board feet (Doyle rule)

on timberland by inventory unit, county, and major species group, Illinois, 2005

Table IL-65.—Sampling errors, in percent, for area, volume, average annual net growth, average annual removals, and average annual mortality on timberland by inventory unit and county, Illinois, 2005

*All tables contain forest attribute estimates for Illinois for measurements taken from 2001 to 2005, except where indicated.

**Gaps in enumeration of tables are placeholders for future tables such as forest health indicator population estimates (e.g., downed woody material).

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Table A.—Area and number of plots in each stratum used for stratification and estimation, Illinois, 2005

Unit code	Estimation unit description ^a	Stratum ^b	Acres	Selected ^c	Office selected ^d	Field selected ^e	Field sampled ^f	Field sampled forested ^g	Total plots sampled for change ^h	Field sampled plots for change ⁱ	Not measured ^j
1	Private Unit 1	Forest	396,000	59	2	57	52	52	0	0	5
1	Private Unit 1	Nonforest	1,766,000	293	282	11	11	3	0	0	0
1	Private Unit 1	Nonforest edge	776,000	141	84	57	53	41	0	0	4
1	Private Unit 1	Forest edge	589,000	98	16	82	72	67	0	0	10
2	Private Unit 2	Forest edge	974,000	164	34	130	125	120	0	0	5
2	Private Unit 2	Nonforest	5,535,000	935	905	30	27	11	0	0	3
2	Private Unit 2	Forest	499,000	86	4	82	79	78	0	0	3
2	Private Unit 2	Nonforest edge	1,393,000	231	123	108	102	77	0	0	6
3	Private Unit 3	Nonforest	18,079,000	3056	3018	38	35	17	0	0	3
3	Private Unit 3	Forest edge	1,689,000	249	50	199	187	166	0	0	12
3	Private Unit 3	Nonforest edge	2,676,000	458	306	152	143	119	0	0	9
3	Private Unit 3	Forest	607,000	111	2	109	101	99	0	0	8
Private total			34,979,000	5,881	4,826	1,055	987	850	-	-	68
1	Shawnee National Forest	All	279,000	94	2	92	91	91	0	0	1
1	Public Unit 1	Nonforest and nonforest edge	80,000	13	8	5	5	4	0	0	0
1	Public Unit 1	Forest and forest edge	83,000	11	0	11	11	10	0	0	0
2	Public Unit 2	Nonforest and nonforest edge	81,000	13	9	4	4	4	0	0	0
2	Public Unit 2	Forest and forest edge	60,000	12	1	11	10	10	0	0	1
3	Public Unit 3	Nonforest edge	121,000	16	9	7	7	6	0	0	0
3	Public Unit 3	Forest	103,000	13	0	13	13	12	0	0	0
3	Public Unit 3	Nonforest	152,000	34	31	3	3	3	0	0	0
3	Public Unit 3	Forest edge	119,000	20	3	17	16	14	0	0	1
Public total			1,078,000	226	63	163	160	154	0	0	3
State total			36,057,000	6,107	4,889	1,218	1,147	1,004	0	0	71

^a Estimation unit description: Description of the sub-population undergoing post-stratification. Units are defined by one or more contiguous counties used for population estimation.

^b Stratum: A subpopulation within each estimation unit defined by combinations of the 4 Phase 1 classes, a land ownership classification created from the PAD and inventory unit.

^c Selected: The number of plots selected to be sampled.

^d Office selected: The number of plots determined to be nonforest based on examination of aerial photographs and digital orthoquads. These plots are withheld from field sampling and considered remotely sampled.

^e Field selected: The number of plots that required field measurement, i.e., that had a likelihood of being forested, or that were forested or non-sampled on a previous visit.

^f Field sampled: The number of field selected plots that were successfully sampled in the field.

^g Field sampled forested: The number of field selected plots that were successfully sampled in the field and found to contain forest land.

^h Total plots sampled for change: The number of plots included in the sample that were successfully sampled in the previous cycle.

ⁱ Field sampled plots for change: The number of plots included in the sample that were successfully sampled in the previous cycle and that were sent to the field for sampling.

^j Not measured: The number of plots that were selected as part of the sample, but were not sampled due to denied access, hazardous condition, or other complications.

Table B.—State-level estimates of major forest resource attributes and their sampling errors, Illinois, 2005

Item	State total	Sampling error
Growing Stock:	<i>million cubic feet</i>	<i>percent</i>
Volume	6,877.1	2.98
Average annual net growth	327.1	11.42
Average annual removals	60.7	23.97
Average annual mortality	86.7	11.88
Sawtimber:	<i>million board feet¹</i>	
Volume	25,398.8	3.31
Average annual net growth	1,220.7	11.56
Average annual removals	249.5	25.59
Average annual mortality	299.3	14.45
Area:	<i>thousand acres</i>	
Forest land	4,525.3	1.87
Timberland	4,363.1	1.98
Biomass (aboveground live trees and saplings):	<i>million dry tons</i>	
Forest land	216.0	2.49
Timberland	207.5	2.62

¹ International ¼-inch rule

All results for forest land except where indicated

Table C.—Compliance to measurement quality objectives (MQO) tolerances of variables based on blind check plots, Illinois, 2005

Variable	Tolerance	Objective	Illinois		All North Central states	
			Data within tolerance	Observations	Data within tolerance	Observations
Plot Level			<i>percent</i>	<i>number</i>	<i>percent</i>	<i>number</i>
National Variables						
Distance to Road	No Tolerance	90.0	76.3	38	82.0	1,677
Water on Plot	No Tolerance	90.0	76.3	38	87.8	1,677
Regional Variables						
Elevation	±50 feet	99.0	68.8	32	83.0	1,528
Latitude - decimal degrees	±0.0001 degree	99.0	100.0	33	99.9	1,538
Longitude - decimal degrees	±0.0001 degree	99.0	90.9	33	90.6	1,538
Latitude - distance	±140 feet		.	.	.	.
Longitude - distance	±140 feet		.	.	.	.
Number of plots				38		1,677
Condition Level						
National Variables						
Condition Status	No Tolerance	99.0	100.0	75	99.0	2,595
Reserve Status	No Tolerance	99.0	100.0	75	99.4	2,595
Owner Group	No Tolerance	99.0	100.0	31	98.2	1,810
Forest Type (Type)	No Tolerance	95.0	74.2	31	82.7	1,810
Forest Type (Group)	No Tolerance	99.0	83.9	31	90.4	1,810
Stand Size	No Tolerance	99.0	80.6	31	87.0	1,810
Regeneration Status	No Tolerance	99.0	100.0	31	98.6	1,810
Tree Density	No Tolerance	99.0	100.0	31	96.9	1,810
Owner Class	No Tolerance	99.0	96.8	31	95.6	1,810
Owner Status	No Tolerance	99.0	100.0	31	98.0	1,810
Regeneration Species	No Tolerance	99.0	100.0	31	98.4	1,810
Stand Age	±10 percent	95.0	35.5	31	68.1	1,810
Disturbance 1	No Tolerance	99.0	77.4	31	93.1	1,796
Disturbance Year 1	±1 year	99.0	66.7	3	74.2	62
Disturbance 2	No Tolerance	99.0	88.9	9	93.1	175
Disturbance Year 2	±1 year	99.0			33.3	3
Disturbance 3	No Tolerance	99.0	100.0	2	92.9	14
Disturbance Year 3	±1 year	99.0	.	.	.	.
Treatment 1	No Tolerance	99.0	100.0	31	95.2	1,796
Treatment Year 1	±1 year	99.0	100.0	3	93.7	111
Treatment 2	No Tolerance	99.0	100.0	3	90.8	195
Treatment Year 2	±1 year	99.0	.	.	100.0	12
Treatment 3	No Tolerance	99.0	.	.	100.0	29
Treatment Year 3	±1 year	99.0	.	.	100.0	5
Physiographic Class	No Tolerance	80.0	64.5	31	77.1	1,810
Present Nonforest Use	No Tolerance	99.0	100.0	58	99.0	1,390
Regional Variables						
NC Land Use	No Tolerance	99.0	93.3	75	90.8	2,595
Number of conditions				75		2,595
Boundary Level						
National Variables						
Boundary Change	No Tolerance	99.0	100.0	9	90.3	421

continued

Table C.—continued

Variable	Tolerance	Objective	Illinois		All North Central states	
			Data within tolerance	Observations	Data within tolerance	Observations
Plot Level			<i>percent</i>	<i>number</i>	<i>percent</i>	<i>number</i>
Constrasting Condition	No Tolerance	99.0	88.9	9	91.9	421
Left Azimuth	±10 degrees	90.0	55.6	9	84.1	421
Corner Mapped	No Tolerance	90.0	100.0	9	97.4	421
Corner Azimuth	±10 degrees	90.0			70.6	17
Corner Distance	±1 foot	90.0			70.6	17
Right Azimuth	±10 degrees	90.0	77.8	9	84.3	421
Number of boundaries				9		421
Subplot Level						
National Variables						
Subplot Center Condition	No Tolerance	99.0	98.5	136	97.2	6,535
Microplot Center Condition	No Tolerance	99.0	98.5	136	96.8	6,535
Slope	±10 percent	90.0	96.3	136	97.6	6,535
Aspect	±10 degrees	90.0	76.6	124	88.6	6,021
Snow/Water Depth	±0.5 foot		91.2	136	66.8	6,535
Number of subplots				136		6,535
Tree Level						
National Variables						
DBH	±0.1 inch per 20 inches	95.0	83.5	454	92.9	27,896
DRC	±0.1 inch per 20 inches	95.0	.	.	63.0	27
Azimuth	±10 degrees	90.0	97.8	454	98.8	27,923
Horizontal Distance	±0.2 foot per 1.0 foot	90.0	95.4	454	97.7	27,923
Species	No Tolerance	95.0	88.8	454	96.5	27,923
Tree Genus	No Tolerance	99.0	98.7	454	99.3	27,904
Tree Status	No Tolerance	95.0	96.9	454	99.0	27,923
Rotten/Missing Cull	±10 percent	90.0	98.8	339	98.9	18,782
Total Length	±10 percent	90.0	70.3	333	83.0	17,997
Actual Length	±10 percent	90.0	72.7	22	81.3	1,973
Compacted Crown Ratio	±10 percent	80.0	80.3	407	86.8	24,377
Uncompacted Crown Ratio (P3)	±10 percent	90.0	.	.	.	.
Crown Class	No Tolerance	85.0	76.2	407	83.0	24,377
Decay Class	±1 class	90.0	91.9	37	95.4	2,860
Cause of Death	No Tolerance	80.0	70.3	37	92.2	2,860
Condition	No Tolerance	99.0	98.2	454	97.5	27,923
Mortality Year	±1 year	70.0	100.0	4	97.2	845
Crown Position	No Tolerance		.	.	.	.
Crown Light Exposure	±1 class	85.0	.	.	.	.
Sapling Crown Vigor Class	No Tolerance	85.0	.	.	.	.
Crown Density	±10 percent	90.0	.	.	.	.
Crown Dieback	±10 percent	90.0	.	.	.	.
Transparency	±10 percent	90.0	.	.	.	.
Regional Variables						
NC Tree Class	No Tolerance	90.0	87.3	442	92.0	27,083
NC Damage Agent 1	No Tolerance	90.0	89.2	407	92.5	24,377
NC Damage Agent 2	No Tolerance	90.0	85.5	62	87.5	3,795

continued

Table C.—continued

Variable	Tolerance	Objective	Illinois		All North Central states	
			Data within tolerance	Observations	Data within tolerance	Observations
Plot Level			<i>percent</i>	<i>number</i>	<i>percent</i>	<i>number</i>
Missouri Damage Code	No Tolerance		.	.	65.3	1,212
Utilization	No Tolerance	99.0	100.0	10	93.4	499
NC Tree Grade	No Tolerance	90.0	41.5	94	68.8	4,502
DBH-Live & Trees with Decay Code 1 or 2	±0.1 inch per 20 inches	95.0	86.1	417	92.9	25,185
DBH-Trees with Decay Codes 3, 4 or 5	±1 inch per 20 inches	95.0	81.8	11	98.9	1,133
Total Length-trees 40 feet and greater	±10 percent	90.0	70.1	264	84.2	14,813
Total Length-trees less than 40 feet	±10 percent	90.0	71.0	69	77.2	3,184
Total Length-trees less than 5 inches DBH	±10 percent	90.0	66.7	12	67.8	230
Number of trees				454		27,923
Seedling Level						
National Variables						
Species	No Tolerance	85.0	75.5	139	91.2	5,659
Genus	No Tolerance	90.0	82.7	139	96.9	5,659
Seedling Count	±20 percent	90.0	53.2	139	67.4	5,659
Seedling Count (coded)	No Tolerance	90.0	54.7	139	73.4	5,659
Number of microplots				49		2,402
Site Tree Level						
National Variables						
Condition List	No Tolerance	99.0	100.0	43	92.9	3,003
Diameter	±0.1 inch per 20 inches	95.0	74.4	43	89.4	2,870
Species	No Tolerance	95.0	86.0	43	97.0	3,003
Genus	No Tolerance	99.0	97.7	43	99.7	3,003
Azimuth	±10 degrees	90.0	88.4	43	98.1	2,870
Distance	±5 feet	90.0	97.7	43	99.4	2,870
Total Length	±10 percent	90.0	69.8	43	90.8	2,870
Diameter Age	±5 years	95.0	72.1	43	81.6	2,870
Regional Variables						
Site Index Method	No Tolerance	99.0	100.0	43	99.8	3,003
Field Site Index	No Tolerance	99.0	100.0	43	98.3	3,003
Number of site trees				43.0		3,003

Table D.—Observed relative bias values (Average [field crew - QA crew]) for measurement variables based on blind check plots, Illinois, 2005

Variable	Unit of measure	Illinois				All North Central states			
		95% CI limits			Observations	95% CI limits			Observations
		Relative bias	Lower	Upper		Relative bias	Lower	Upper	
Plot Level					number				number
National Variables									
Distance to Road	code	0.29	0.00	0.61	38	-0.02	-0.07	0.03	1,677
Water on Plot	code	0.26	-0.51	1.05	38	0.10	0.01	0.20	1,677
Regional Variables									
Elevation	foot	-0.25	-17.13	21.33	32	-23.61	-51.95	-1.69	1,528
Latitude - decimal degrees	degree	0.00	0.00	0.00	33	-0.00	-0.01	0.00	1,538
Longitude - decimal degrees	degree	-0.00	-0.00	0.00	33	0.00	-0.00	0.00	1,538
Latitude - distance	foot								
Longitude - distance	foot								
Number of plots					38				1,677
Condition Level									
National Variables									
Condition Status	code	0.00	0.00	0.00	75	-0.00	-0.01	0.01	2,595
Reserve Status	code	0.00	0.00	0.00	75	0.00	0.00	0.01	2,595
Owner Group	code	0.00	0.00	0.00	31	0.03	-0.12	0.20	1,810
Forest Type (Type)	code	15.16	-11.08	43.08	31	12.40	6.12	19.11	1,810
Forest Type (Group)	code	16.13	-9.68	43.55	31	12.60	6.24	19.45	1,810
Stand Size	code	0.06	-0.08	0.23	31	0.01	-0.02	0.03	1,810
Regeneration Status	code	0.00	0.00	0.00	31	-0.00	-0.01	0.00	1,810
Tree Density	code	0.00	0.00	0.00	31	-0.00	-0.01	0.01	1,810
Owner Class	code	-0.13	-0.39	0.00	31	0.02	-0.14	0.21	1,810
Owner Status	code	0.00	0.00	0.00	31	0.01	0.00	0.02	1,810
Regeneration Species	code	0.00	0.00	0.00	31	-0.10	-0.75	0.55	1,810
Stand Age	year	1.16	-3.48	5.90	31	-0.72	-1.26	-0.19	1,810
Disturbance 1	code	-2.19	-10.89	4.31	31	-0.27	-0.81	0.31	1,796
Disturbance Year 1	year	2,666.67	0.33	7,999.00	3	1,805.84	773.98	2,773.14	62
Disturbance 2	code	-3.67	-11.00	0.00	9	-0.70	-2.27	1.02	175
Disturbance Year 2	year	7,997.00	7,997.00	7,997.00	1	2,667.00	1.00	7,997.00	3
Disturbance 3	code	0.00	0.00	0.00	2	-5.71	-17.14	0.00	14
Disturbance Year 3	year								
Treatment 1	code	0.00	0.00	0.00	31	0.13	-0.04	0.29	1,796
Treatment Year 1	year	0.33		1.00	3	0.06	-0.11	0.24	111
Treatment 2	code	0.00	0.00	0.00	3	2.36	0.51	4.38	195
Treatment Year 2	year					0.00	-0.25	0.17	12
Treatment 3	code					0.00	0.00	0.00	29
Treatment Year 3	year					0.00	0.00	0.00	5
Physiographic Class	code	0.87	-0.06	1.97	31	-0.04	-0.24	0.12	1,810
Present Nonforest Use	code	0.00	0.00	0.00	58	0.15	0.01	0.30	1,390
Regional Variables									
NC Land Use	code	0.75	-0.09	2.18	75	0.00	-0.22	0.22	2,595
Number of conditions					75				2,595
Boundary Level									
National Variables									

continued

Table D.—continued

Variable	Unit of measure	Illinois				All North Central states			
		Relative bias	Lower	Upper	Observations	Relative bias	Lower	Upper	Observations
Boundary Change	code	0.00	0.00	0.00	9	0.11	0.06	0.16	421
Constrasting Condition	cond	0.11	0.00	0.33	9	0.01	-0.01	0.04	421
Left Azimuth	degree	0.44	-10.78	11.94	9	-3.61	-8.31	0.76	421
Corner Mapped	code	0.00	0.00	0.00	9	-0.01	-0.02	0.01	421
Corner Azimuth	degree	-310.00	-310.00	-310.00	1	-17.94	-55.38	3.68	17
Corner Distance	foot	-13.00	-13.00	-13.00	1	0.06	-2.18	1.88	17
Right Azimuth	degree	0.56	-7.11	7.17	9	0.58	-3.92	4.88	421
Number of boundaries					9				421
Subplot Level									
National Variables									
Subplot Center Condition	code	-0.01	-0.04	0.00	136	0.00	0.00	0.01	6,535
Microplot Center Condition	code	-0.01	-0.04	0.00	136	0.00	-0.00	0.01	6,535
Slope	percent	0.01	-0.76	0.79	136	0.63	0.14	1.24	6,535
Aspect	degree	5.56	-4.88	16.64	124	-0.57	-1.86	0.69	6,021
Snow/Water Depth	foot	-0.24	-1.03	0.57	136	-0.40	-0.56	-0.24	6,535
Number of subplots					136				6,535
Tree Level									
National Variables									
DBH	inch	0.02	-0.16	0.19	454	-0.02	-0.03	-0.02	27,896
DRC	inch					0.11	-0.13	0.43	27
Azimuth	degree	-0.24	-1.39	0.95	454	0.23	0.15	0.31	27,923
Horizontal Distance	foot	-0.07	-0.15	-0.03	454	0.00	-0.01	0.01	27,923
Species	code	1.26	-2.75	5.04	454	0.18	-0.14	0.54	27,923
Tree Genus	code	1.48	-2.69	5.18	454	0.20	-0.15	0.52	27,904
Tree Status	code	0.07	0.03	0.11	454	0.00	0.00	0.00	27,923
Rotten/Missing Cull	percent	-0.45	-1.05	-0.04	339	0.02	-0.03	0.07	18,782
Total Length	foot	-0.76	-2.07	0.58	333	0.30	0.08	0.48	17,997
Actual Length	foot	2.24	-2.12	7.11	22	-1.37	-2.38	-0.63	1,973
Compacted Crown Ratio	percent	-0.60	-1.74	0.65	407	0.33	0.20	0.44	24,377
Uncompacted Crown Ratio (P3)	percent								
Crown Class	code	-0.12	-0.19	-0.05	407	0.00	-0.00	0.01	24,377
Decay Class	code	0.05	-0.26	0.38	37	0.02	-0.00	0.05	2,860
Cause of Death	code	-1.35	-9.32	7.97	37	1.77	1.25	2.24	2,860
Condition	code	-0.02	-0.03	-0.01	454	0.00	-0.00	0.00	27,923
Mortality Year	year	-0.25	-0.75	0.00	4	0.04	0.01	0.09	845
Crown Position	code								
Crown Light Exposure	code								
Sapling Crown Vigor Class	code								
Crown Density	percent								
Crown Dieback	percent								
Transparency	percent								
Regional Variables									
NC Tree Class	code	0.11	-0.37	0.57	442	0.05	0.00	0.09	27,083
NC Damage Agent 1	code	1.74	-6.86	12.55	407	4.33	3.27	5.43	24,377

continued

Table D.—continued

Variable	Unit of measure	Illinois				All North Central states			
		Relative bias	95% CI limits		Observations	Relative bias	95% CI limits		Observations
			Lower	Upper			Lower	Upper	
NC Damage Agent 2	code	-4.53	-33.73	34.59	62	4.95	0.64	8.59	3,795
Missouri Damage Code	code					73.63	53.84	96.23	1,212
Utilization	code	0.00	0.00	0.00	10	-0.00	-0.03	0.02	499
NC Tree Grade	code	21.49	-1.91	48.03	94	0.25	-3.06	3.95	4,502
DBH-Live & Trees with Decay Code 1 or 2	inch	-0.14	-0.23	-0.06	417	-0.03	-0.04	-0.02	25,185
DBH-Trees with Decay Codes 3, 4 or 5	inch	-0.40	-1.75	0.45	11	-0.03	-0.06	-0.01	1,133
Total Length-trees 40 feet and greater	foot	-0.56	-2.03	0.82	264	0.75	0.62	0.88	14,813
Total Length-trees less than 40 feet	foot	-1.51	-4.21	1.06	69	-1.79	-2.76	-0.92	3,184
Total Length-trees less than 5 inches DBH	foot	-1.59	-8.70	4.41	12	2.39	0.51	4.05	230
Number of trees					454				27,923
Seedling Level									
National Variables									
Species	code	-0.04	-0.14	0.03	139	0.00	-0.01	0.01	5,659
Genus	code	-0.01	-0.09	0.05	139	-0.00	-0.00	0.00	5,659
Seedling Count	number	-18.69	-33.05	-5.82	139	-12.04	-14.25	-9.39	5,659
Seedling Count (coded)	number	-0.09	-0.31	0.12	139	0.02	-0.00	0.05	5,659
Number of microplots					49				2,402
Site Tree Level									
National Variables									
Condition List	code	0.00	0.00	0.00	43	0.17	-0.09	0.38	3,003
Diameter	inch	0.00	-0.10	0.11	43	-0.01	-0.02	0.01	2,870
Species	code	-2.05	-8.88	2.43	43	-0.15	-0.37	0.01	3,003
Genus	code	-3.26	-9.77	0.00	43	-0.15	-0.36	0.02	3,003
Azimuth	degree	2.47	-1.65	6.51	43	0.07	-0.29	0.49	2,870
Distance	foot	0.22	-0.10	0.71	43	0.04	0.01	0.07	2,870
Total Length	foot	-3.41	-6.53	-0.30	43	0.26	0.01	0.53	2,870
Diameter Age	year	0.19	-2.36	2.63	43	0.15	-0.05	0.34	2,870
Regional Variables									
Site Index Method	code	0.00	0.00	0.00	43	-0.00	-0.00	0.00	3,003
Field Site Index	feet	0.00	0.00	0.00	43	0.09	0.00	0.18	3,003
Number of site trees					43				3,003

Table E.—FIA nonresponse by strata for selected inventories, Illinois, 2005

Owner and strata(um)	Number of plots selected	Sampled	Denied access	Hazardous	Other	Percent response rate
----- number of plots -----						
Shawnee National Forest						
1, 2, 3, 4	94	93	0	1	0	98.9
Private Unit 1						
1	293	293	0	0	0	100
2	141	137	4	0	0	97.2
3	59	54	5	0	0	91.5
4	98	87.9	10	0.1	0	89.7
Private Unit 2						
1	935	932	3	0	0	99.7
2	231	225	6	0	0	97.4
3	86	83	3	0	0	96.5
4	164	158.8	5	0.3	0	96.8
Private Unit 3						
1	3,056	3,052.8	3	0.3	0	99.9
2	458	448.8	9.3	0	0	98.0
3	111	103	8	0	0	92.8
4	249	237.0	11	1	0	95.2
Public Unit 1						
1, 2	13	13	0	0	0	100
3, 4	11	11	0	0	0	100
Public Unit 2						
1, 2	13	13	0	0	0	100
3, 4	12	11	0	1	0	91.7
Public Unit 3						
1	34	34	0	0	0	100
2	16	16	0	0	0	100
3	13	13	0	0	0	100
4	20	19	0	1	0	95
Total	6,107	6,035	67	5	0	97.2

Strata codes:

1: Nonforest

2: Nonforest edge

3: Forest

4: Forest edge

Table IL-1.—Percentage of area by land status, Illinois, 2005

Land status	Percentage of area
Accessible forest land	
Unreserved forest land	
Timberland	11.5
Unproductive	--
Total unreserved forest land	11.5
Reserved forest land	
Productive	0.4
Unproductive	--
Total reserved forest land	0.4
All accessible forest land	12.0
Nonforest and other land	
Nonforest land	84.8
Water	
Census	1.2
Non-Census	0.8
All nonforest and other land	86.8
Nonsampled land	
Access denied	1.1
Hazardous conditions	0.1
Other	--
All land	100.0
Total area (thousands of acres)	36,057

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the percentage rounds to less than 0.1 percent. Columns and rows may not add to their totals due to rounding.

Table IL-2.—Area of forest land, in thousand acres, by owner class and forest land status, Illinois, 2005

Owner class	Unreserved forests			Reserved forests			All forest land
	Timberland	Unproductive	Total	Productive	Unproductive	Total	
Forest Service							
National forest	267.6	--	267.6	9.0	--	9.0	276.6
Other national forest	10.5	--	10.5	--	--	--	10.5
Other Federal							
Fish and Wildlife Service	43.1	--	43.1	7.6	--	7.6	50.7
Department of Defense or Energy	7.1	--	7.1	--	--	--	7.1
Other Federal	20.7	--	20.7	--	--	--	20.7
State and local government							
State	134.8	--	134.8	68.7	--	68.7	203.6
Local (county, municipal, etc.)	152.7	--	152.7	70.6	--	70.6	223.3
Private							
Undifferentiated private	3,726.5	--	3,726.5	6.3	--	6.3	3,732.8
All owners	4,363.1	--	4,363.1	162.2	--	162.2	4,525.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

Table IL-3.—Area of forest land, in thousand acres, by forest-type group and productivity class, Illinois, 2005

Forest-type group	Site-productivity class (cubic feet/acre/year)							All classes
	0-19	20-49	50-84	85-119	120-164	165-224	225+	
White / red / jack pine group	--	0.7	22.2	16.1	11.1	--	--	50.2
Loblolly / shortleaf pine group	--	--	--	17.7	8.9	3.0	--	29.6
Other eastern softwoods group	--	10.6	6.4	--	--	--	--	17.0
Exotic softwoods group	--	--	1.8	--	--	--	--	1.8
Oak / pine group	--	11.3	35.2	1.3	3.0	--	--	50.8
Oak / hickory group	--	407.0	1,504.6	1,018.3	185.2	50.2	--	3,165.2
Oak / gum / cypress group	--	--	17.1	21.0	--	--	--	38.0
Elm / ash / cottonwood group	--	140.2	434.4	405.5	81.4	2.3	--	1,063.7
Maple / beech / birch group	--	14.0	40.1	24.4	5.9	--	--	84.4
Aspen / birch group	--	--	1.4	--	--	--	--	1.4
Exotic hardwoods group	--	1.5	--	--	--	--	--	1.5
Nonstocked	--	9.5	7.5	3.2	1.5	--	--	21.7
All forest-type groups	--	594.8	2,070.6	1,507.4	296.9	55.5	--	4,525.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

Table IL-4.—Area of forest land, in thousand acres, by forest-type group, ownership group, and land status, Illinois, 2005

Forest-type group	Forest Service			Other Federal			State and local government			Undifferentiated private		
	Timber-land	Other forest land		Timber-land	Other forest land		Timber-land	Other forest land		Timber-land	Other forest land	All forest land
White / red / jack pine group	3.7	--	--	--	--	--	14.2	--	--	32.2	--	50.2
Loblolly / shortleaf pine group	21.7	0.5	--	--	--	--	--	--	--	7.4	--	29.6
Other eastern softwoods group	2.8	--	--	--	--	--	--	--	--	14.2	--	17.0
Exotic softwoods group	--	--	--	--	--	--	1.8	--	--	--	--	1.8
Oak / pine group	9.0	--	--	--	--	--	--	--	--	41.8	--	50.8
Oak / hickory group	221.4	8.5	--	25.4	7.6	--	138.5	87.6	--	2,670.0	6.3	3,165.2
Oak / gum / cypress group	3.0	--	--	--	--	--	--	--	--	35.0	--	38.0
Elm / ash / cottonwood group	8.3	--	--	45.5	--	--	129.9	51.8	--	828.3	--	1,063.7
Maple / beech / birch group	8.2	--	--	--	--	--	--	--	--	76.2	--	84.4
Aspen / birch group	--	--	--	--	--	--	--	--	--	1.4	--	1.4
Exotic hardwoods group	--	--	--	--	--	--	--	--	--	1.5	--	1.5
Nonstocked	--	--	--	--	--	--	3.1	--	--	18.5	--	21.7
All forest-type groups	278.1	9.0	70.9	7.6	139.4	287.5	18.5	6.3	3,726.5	21.7	4,525.3	

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

Table IL-5.—Area of forest land, in thousand acres, by forest-type group and stand-size class, Illinois, 2005

Forest-type group	Stand-size class				All size classes
	Large diameter	Medium diameter	Small diameter	Nonstocked	
White / red / jack pine group	40.3	9.8	--	--	50.2
Loblolly / shortleaf pine group	28.7	0.6	0.3	--	29.6
Other eastern softwoods group	5.2	5.8	6.0	--	17.0
Exotic softwoods group	--	--	1.8	--	1.8
Oak / pine group	29.0	21.8	--	--	50.8
Oak / hickory group	2,322.8	626.3	216.1	--	3,165.2
Oak / gum / cypress group	20.1	14.9	3.0	--	38.0
Elm / ash / cottonwood group	750.2	209.2	104.4	--	1,063.7
Maple / beech / birch group	73.2	8.2	3.0	--	84.4
Aspen / birch group	--	1.4	--	--	1.4
Exotic hardwoods group	1.5	--	--	--	1.5
Nonstocked	--	--	--	21.7	21.7
All forest-type groups	3,271.0	898.0	334.6	21.7	4,525.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

Table IL-6.— Area of forest land , in thousand acres,by forest-type group and stand-age class, Illinois, 2005

Forest-type group	Non stocked	Stand-age class (years)											All classes
		1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	161-180	181-200	201+	
White / red / jack pine group	--	--	12.8	22.4	7.9	7.0	--	--	--	--	--	--	50.2
Loblolly / shortleaf pine group	--	0.3	7.6	21.5	0.2	--	--	--	--	--	--	--	29.6
Other eastern softwoods group	--	--	12.6	1.6	2.8	--	--	--	--	--	--	--	17.0
Exotic softwoods group	--	--	1.8	--	--	--	--	--	--	--	--	--	1.8
Oak / pine group	--	1.2	13.4	30.3	6.0	--	--	--	--	--	--	--	50.8
Oak / hickory group	--	139.0	561.3	1,054.4	859.3	373.0	116.2	30.9	23.1	2.4	--	--	3,165.2
Oak / gum / cypress group	--	--	8.4	14.0	8.4	7.3	--	--	--	--	--	--	38.0
Elm / ash / cottonwood group	--	58.1	293.1	516.1	183.3	6.2	6.9	--	--	--	--	--	1,063.7
Maple / beech / birch group	--	--	8.3	25.9	38.1	12.0	--	--	--	--	--	--	84.4
Aspen / birch group	--	--	1.4	--	--	--	--	--	--	--	--	--	1.4
Exotic hardwoods group	--	--	1.5	--	--	--	--	--	--	--	--	--	1.5
Nonstocked	21.7	--	--	--	--	--	--	--	--	--	--	--	21.7
All forest-type groups	21.7	198.5	922.0	1,686.2	1,106.1	405.6	123.1	30.9	23.1	2.4	--	--	4,525.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

Table IL-7.—Area of forest land, in thousand acres, by forest-type group and stand origin, Illinois, 2005

Forest-type group	Stand origin		All forest land
	Natural stands	Artificial regeneration	
White / red / jack pine group	5.3	44.8	50.2
Loblolly / shortleaf pine group	3.5	26.1	29.6
Other eastern softwoods group	17.0	--	17.0
Exotic softwoods group	--	1.8	1.8
Oak / pine group	49.5	1.3	50.8
Oak / hickory group	3,155.3	9.9	3,165.2
Oak / gum / cypress group	38.0	--	38.0
Elm / ash / cottonwood group	1,051.6	12.1	1,063.7
Maple / beech / birch group	84.4	--	84.4
Aspen / birch group	1.4	--	1.4
Exotic hardwoods group	1.5	--	1.5
Nonstocked	21.7	--	21.7
All forest-type groups	4,429.2	96.1	4,525.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

Table IL-8.—Area of forest land, in thousand acres, by forest-type group and disturbance class, Illinois, 2005

Forest-type group	Disturbance class								All forest land
	None	Insects	Disease	Weather	Fire	Domestic animals	Wild animals	Human	
White / red / jack pine group	44.8	--	--	5.3	--	--	--	--	50.2
Loblolly / shortleaf pine group	22.5	--	--	--	--	--	7.1	--	29.6
Other eastern softwoods group	15.4	--	--	--	--	1.6	--	--	17.0
Exotic softwoods group	1.8	--	--	--	--	--	--	--	1.8
Oak / pine group	43.0	--	--	--	--	7.9	--	--	50.8
Oak / hickory group	2,865.3	17.0	1.9	76.2	16.0	119.2	15.5	47.9	3,165.2
Oak / gum / cypress group	14.3	--	--	12.6	--	4.4	6.7	--	38.0
Elm / ash / cottonwood group	605.8	--	--	377.5	--	3.0	55.6	21.8	1,063.7
Maple / beech / birch group	69.4	--	--	--	--	7.2	--	1.7	84.4
Aspen / birch group	1.4	--	--	--	--	--	--	--	1.4
Exotic hardwoods group	1.5	--	--	--	--	--	--	--	1.5
Nonstocked	15.1	--	--	1.7	--	4.9	--	--	21.7
All forest-type groups	3,700.1	17.0	1.9	473.4	16.0	148.1	84.9	71.5	4,525.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

Table IL-9.—Area of timberland, in thousand acres, by forest-type group and stand-size class, Illinois, 2005

Forest-type group	Stand-size class					All size classes
	Large diameter	Medium diameter	Small diameter	Chaparral	Nonstocked	
White / red / jack pine group	40.3	9.8	--	--	--	50.2
Loblolly / shortleaf pine group	28.2	0.6	0.3	--	--	29.1
Other eastern softwoods group	5.2	5.8	6.0	--	--	17.0
Exotic softwoods group	--	--	1.8	--	--	1.8
Oak / pine group	29.0	21.8	--	--	--	50.8
Oak / hickory group	2,231.4	615.9	207.9	--	--	3,055.3
Oak / gum / cypress group	20.1	14.9	3.0	--	--	38.0
Elm / ash / cottonwood group	718.6	190.4	102.9	--	--	1,011.9
Maple / beech / birch group	73.2	8.2	3.0	--	--	84.4
Aspen / birch group	--	1.4	--	--	--	1.4
Exotic hardwoods group	1.5	--	--	--	--	1.5
Nonstocked	--	--	--	--	21.7	21.7
All forest-type groups	3,147.6	868.9	324.9	--	21.7	4,363.1

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

Table IL-10.—Number of live trees (at least 1 inch d.b.h/d.r.c.) in thousand trees, on forest land by species group and diameter class, Illinois, 2005

Species group	Diameter class (inches)																All classes
	1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 24.9	25.0- 28.9	29.0- 32.9	33.0- 36.9	37.0+		
Softwood species groups																	
Eastern softwood species groups																	
Loblolly and shortleaf pines	1,123	--	1,106	1,595	1,388	1,174	609	126	72	18	36	--	--	--	--	7,249	
Other yellow pines	--	534	429	544	374	--	--	--	--	--	--	--	--	--	--	1,881	
Eastern white and red pines	225	--	1,552	2,994	2,233	1,597	763	504	167	95	--	48	--	--	--	10,178	
Jack pine	--	--	338	593	113	--	38	--	--	--	--	--	--	--	--	1,082	
Spruce and balsam fir	--	--	371	124	113	38	76	--	--	--	--	--	--	--	--	721	
Cypress	--	--	44	44	44	44	--	--	--	44	44	--	--	--	--	265	
Other eastern softwoods	11,788	7,400	3,879	2,001	1,525	391	241	149	34	38	34	--	--	--	--	27,480	
All softwoods	13,136	7,935	7,719	7,895	5,791	3,244	1,727	780	273	195	114	48	--	--	--	48,857	
Hardwood species groups																	
Eastern hardwood species groups																	
Select white oaks	19,960	11,566	6,133	4,576	4,916	4,657	4,669	4,368	3,685	2,659	3,546	1,484	975	285	62	73,541	
Select red oaks	6,126	4,688	3,188	1,646	1,922	1,574	1,352	1,538	1,415	813	1,390	660	115	71	36	26,534	
Other white oaks	1,791	--	1,166	1,411	1,723	1,687	967	600	396	425	361	--	18	--	--	10,547	
Other red oaks	36,065	22,926	8,815	6,864	6,153	5,059	5,624	3,785	2,989	1,392	1,737	811	251	53	155	102,680	
Hickory	81,296	27,687	20,793	14,531	9,602	7,341	4,956	3,099	1,382	811	557	254	156	--	--	172,464	
Yellow birch	--	--	71	35	71	--	--	--	--	--	--	--	--	--	--	177	
Hard maple	82,909	28,855	10,819	4,910	3,554	1,740	1,457	955	577	274	373	111	37	--	--	136,573	
Soft maple	27,319	9,030	9,307	7,135	4,927	4,564	3,372	2,105	1,786	1,741	1,447	551	257	155	75	73,772	
Beech	8,761	568	249	100	64	18	90	36	44	36	18	--	62	--	--	10,046	
Sweetgum	19,467	5,598	2,931	1,739	1,480	687	693	486	126	239	90	55	--	--	--	33,589	
Tupelo and blackgum	14,354	4,549	1,425	661	571	162	162	18	44	36	36	--	--	--	--	22,018	
Ash	65,644	24,742	14,728	9,129	5,890	4,397	2,439	1,479	921	549	261	156	71	--	--	130,404	
Cottonwood and aspen	2,670	1,397	856	751	1,058	671	544	682	527	481	557	197	144	192	154	10,882	
Basswood	6,322	3,719	1,978	1,328	690	603	413	318	157	129	149	--	--	--	--	15,806	
Yellow-poplar	7,788	2,508	1,684	874	887	724	488	270	150	325	319	--	--	--	18	16,036	
Black walnut	9,242	4,466	4,713	4,231	3,198	2,516	1,684	1,463	524	396	261	103	--	--	--	32,797	
Other eastern soft hardwoods	423,596	157,326	70,056	37,271	20,791	12,564	6,665	3,896	2,052	1,181	1,326	744	117	117	142	737,845	
Other eastern hard hardwoods	106,767	24,336	13,626	8,488	4,676	2,780	2,152	1,010	450	404	144	172	36	--	--	165,041	
Eastern noncommercial hardwoods	134,678	46,593	15,132	6,218	2,102	1,153	708	273	122	115	43	79	--	--	--	207,216	
All hardwoods	1,054,757	380,553	187,669	111,899	74,273	52,899	38,436	26,381	17,349	12,007	12,615	5,377	2,238	874	642	1,977,969	
All species groups	1,067,893	388,488	195,389	119,794	80,064	56,143	40,162	27,161	17,622	12,202	12,729	5,425	2,238	874	642	2,026,826	

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All table cells without observations in the inventory sample are indicated by --. Table value of 0 indicates the number of trees rounds to less than 1 thousand trees. Columns and rows may not add to their totals due to rounding.

Table IL-11.—Number of growing-stock trees(at least 1 inch d.b.h/d.r.c.) in thousand trees, on timberland by species group and diameter class, Illinois, 2005

Species group	Diameter class (inches)														All classes
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 24.9	25.0- 28.9	29.0- 32.9	33.0- 36.9	37.0+		
Softwood species groups															
Eastern softwood species groups															
Loblolly and shortleaf pines	1,106	1,559	1,334	1,174	591	126	72	18	36	--	--	--	--	--	6,018
Other yellow pines	386	502	288	--	--	--	--	--	--	--	--	--	--	--	1,176
Eastern white and red pines	1,552	2,958	2,198	1,554	763	504	167	95	--	48	--	--	--	--	9,839
Jack pine	302	555	113	--	38	--	--	--	--	--	--	--	--	--	1,009
Spruce and balsam fir	371	124	113	38	76	--	--	--	--	--	--	--	--	--	721
Cypress	44	44	44	44	--	--	--	44	44	--	--	--	--	--	265
Other eastern softwoods	3,385	1,527	1,099	354	207	78	--	38	--	--	--	--	--	--	6,689
All softwoods	7,147	7,268	5,190	3,165	1,675	709	239	195	80	48	--	--	--	--	25,715
Hardwood species groups															
Eastern hardwood species groups															
Select white oaks	5,448	4,022	4,360	4,362	4,385	3,764	3,406	2,470	3,170	1,211	682	123	27	37,429	
Select red oaks	2,804	1,492	1,732	1,458	1,334	1,448	1,288	813	1,185	481	72	71	36	14,214	
Other white oaks	1,057	1,339	1,669	1,669	878	564	342	289	361	--	--	--	--	--	8,169
Other red oaks	7,637	5,595	5,600	4,456	5,378	3,724	2,771	1,198	1,516	583	177	53	76	38,764	
Hickory	19,852	14,180	9,087	7,043	4,757	2,974	1,209	714	521	211	156	--	--	--	60,703
Hard maple	9,392	4,461	3,155	1,443	1,404	919	500	274	373	78	37	--	--	--	22,036
Soft maple	6,490	5,857	4,113	3,445	2,836	1,591	1,548	1,442	1,168	473	257	122	38	29,379	
Beech	153	54	18	18	44	36	44	36	18	--	44	--	--	--	465
Sweetgum	2,885	1,739	1,444	687	519	412	81	239	44	18	--	--	--	--	8,068
Tupelo and blackgum	1,320	661	508	72	162	--	44	36	18	--	--	--	--	--	2,822
Ash	12,950	8,055	4,815	3,778	2,213	1,301	810	531	114	156	71	--	--	--	34,792
Cottonwood and aspen	783	708	921	625	461	647	484	392	473	114	144	192	154	6,100	
Basswood	1,768	1,012	654	485	366	245	157	86	149	--	--	--	--	--	4,923
Yellow-poplar	1,666	874	887	569	488	179	150	325	319	--	--	--	18	5,477	
Black walnut	4,143	3,581	2,777	2,230	1,608	1,175	450	361	225	66	--	--	--	--	16,615
Other eastern soft hardwoods	56,294	30,073	15,956	9,720	5,063	3,205	1,584	1,023	1,108	580	80	36	142	124,862	
Other eastern hard hardwoods	9,256	5,907	3,335	2,145	1,894	783	377	321	108	172	36	--	--	--	24,333
All hardwoods	143,898	89,610	61,031	44,206	33,790	22,967	15,245	10,547	10,870	4,142	1,755	598	491	439,150	
All species groups	151,044	96,879	66,221	47,371	35,465	23,675	15,484	10,742	10,951	4,190	1,755	598	491	464,865	

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Table IL-12.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, by owner class and forest land status, Illinois, 2005

Owner class	Unreserved forests			Reserved forests			All forest land
	Timberland	Unproductive	Total	Productive	Unproductive	Total	
Forest Service							
National forest	550.9	--	550.9	17.2	--	17.2	568.1
Other national forest	33.7	--	33.7	--	--	--	33.7
Other Federal							
Fish and Wildlife Service	73.5	--	73.5	21.3	--	21.3	94.8
Department of Defense or Energy	30.5	--	30.5	--	--	--	30.5
Other Federal	49.8	--	49.8	--	--	--	49.8
State and local government							
State	298.5	--	298.5	160.5	--	160.5	459.0
Local (county, municipal, etc.)	250.6	--	250.6	114.6	--	114.6	365.1
Private							
Undifferentiated private	6,351.9	--	6,351.9	1.6	--	1.6	6,353.5
All owners	7,639.4	--	7,639.4	315.1	--	315.1	7,954.5

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-13.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on forest land by forest-type group and stand-size class, Illinois, 2005

Forest-type group	Stand-size class					All size classes
	Large diameter	Medium diameter	Small diameter	Chaparral	Nonstocked	
White / red / jack pine group	90.7	17.4	--	--	--	108.1
Loblolly / shortleaf pine group	71.7	1.4	--	--	--	73.0
Other eastern softwoods group	11.6	4.7	1.1	--	--	17.4
Exotic softwoods group	--	--	0.6	--	--	0.6
Oak / pine group	55.7	16.9	--	--	--	72.6
Oak / hickory group	4,641.5	635.7	61.3	--	--	5,338.5
Oak / gum / cypress group	35.3	17.5	0.0	--	--	52.8
Elm / ash / cottonwood group	1,915.8	221.9	13.3	--	--	2,150.9
Maple / beech / birch group	124.4	10.9	0.7	--	--	136.0
Aspen / birch group	--	2.1	--	--	--	2.1
Exotic hardwoods group	1.3	--	--	--	--	1.3
Nonstocked	--	--	--	--	1.0	1.0
All forest-type groups	6,948.0	928.4	77.1	--	1.0	7,954.5

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-14.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on forest land by species group and ownership group, Illinois, 2005

Species group	Ownership group				All owners
	Forest Service	Other Federal	State and local government	Undifferentiated private	
Softwood species groups					
Eastern softwood species groups					
Loblolly and shortleaf pines	62.3	--	--	8.6	70.9
Other yellow pines	--	--	0.8	5.3	6.1
Eastern white and red pines	5.5	--	33.1	66.0	104.6
Jack pine	--	--	4.3	1.1	5.3
Spruce and balsam fir	--	--	3.4	1.0	4.3
Cypress	--	--	--	7.0	7.0
Other eastern softwoods	4.2	0.2	1.8	38.7	44.8
All softwoods	71.9	0.2	43.3	127.7	243.0
Hardwood species groups					
Eastern hardwood species groups					
Select white oaks	104.2	6.7	143.7	996.4	1,251.0
Select red oaks	44.7	4.1	60.9	353.8	463.6
Other white oaks	29.7	--	2.6	115.0	147.2
Other red oaks	68.6	11.9	73.2	772.0	925.8
Hickory	75.1	0.9	49.5	646.6	772.1
Yellow birch	--	--	--	0.9	0.9
Hard maple	38.3	5.1	14.3	225.7	283.4
Soft maple	10.1	76.6	107.2	580.4	774.3
Beech	8.4	--	1.8	9.7	19.9
Sweetgum	13.0	7.8	11.7	70.9	103.4
Tupelo and blackgum	10.4	--	2.0	10.9	23.3
Ash	13.7	12.7	56.3	341.1	423.8
Cottonwood and aspen	24.7	9.5	48.7	250.0	332.9
Basswood	0.0	0.1	5.3	66.6	72.1
Yellow-poplar	43.9	0.8	12.4	69.9	127.0
Black walnut	5.9	2.1	33.1	196.1	237.3
Other eastern soft hardwoods	34.7	25.1	130.5	1,157.8	1,348.1
Other eastern hard hardwoods	3.0	11.0	22.8	255.9	292.7
Eastern noncommercial hardwoods	1.5	0.5	4.7	106.2	112.9
All hardwoods	529.9	174.9	780.8	6,225.9	7,711.5
All species groups	601.8	175.1	824.1	6,353.5	7,954.5

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-15.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on forest land by species group and diameter class, Illinois, 2005

Species group	Diameter class (inches)														37.0+	All classes
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-24.9	25.0-28.9	29.0-32.9	33.0-36.9				
Softwood species groups																
Eastern softwood species groups																
Loblolly and shortleaf pines	3	9	14	19	15	4	4	1	3	--	--	--	--	--	71	
Other yellow pines	1	2	3	--	--	--	--	--	--	--	--	--	--	--	6	
Eastern white and red pines	4	15	19	21	16	14	7	5	--	5	--	--	--	--	105	
Jack pine	1	3	1	--	1	--	--	--	--	--	--	--	--	--	5	
Spruce and balsam fir	1	1	1	1	1	--	--	--	--	--	--	--	--	--	4	
Cypress	0	0	0	0	--	--	--	2	4	--	--	--	--	--	7	
Other eastern softwoods	8	9	12	4	4	3	1	2	1	--	--	--	--	--	45	
All softwoods	17	38	50	45	37	22	11	10	8	5	--	--	--	--	243	
Hardwood species groups																
Eastern hardwood species groups																
Select white oaks	14	23	45	67	101	131	146	139	250	149	128	47	12	12	1,251	
Select red oaks	8	9	19	25	32	48	60	46	109	69	16	14	9	9	464	
Other white oaks	3	7	15	23	20	17	15	21	25	--	1	--	--	--	147	
Other red oaks	20	34	56	74	123	117	125	76	129	87	35	10	41	41	926	
Hickory	48	75	95	120	118	107	63	51	45	27	25	--	--	--	772	
Yellow birch	0	0	1	--	--	--	--	--	--	--	--	--	--	--	1	
Hard maple	27	27	36	29	36	34	27	17	32	12	6	--	--	--	283	
Soft maple	24	39	48	70	80	71	79	100	113	62	40	30	18	18	774	
Beech	1	1	1	0	2	1	2	2	2	--	9	--	--	--	20	
Sweetgum	6	9	14	11	16	16	6	14	8	6	--	--	--	--	103	
Tupelo and blackgum	3	3	5	2	4	0	2	2	2	--	--	--	--	--	23	
Ash	34	46	55	66	57	49	40	33	17	16	11	--	--	--	424	
Cottonwood and aspen	2	4	11	10	14	23	25	28	52	24	26	46	68	68	333	
Basswood	4	7	6	10	10	10	7	7	12	--	--	--	--	--	72	
Yellow-poplar	4	6	9	13	14	11	8	23	33	--	--	--	6	6	127	
Black walnut	10	21	28	35	35	42	21	20	17	9	--	--	--	--	237	
Other eastern soft hardwoods	142	169	173	174	141	121	84	66	104	81	23	17	54	54	1,348	
Other eastern hard hardwoods	27	36	38	38	47	32	18	23	11	18	5	--	--	--	293	
Eastern noncommercial hardwoods	27	24	15	13	12	7	4	4	2	6	--	--	--	--	113	
All hardwoods	405	539	668	781	860	835	731	670	962	565	324	165	208	208	7,712	
All species groups	422	578	718	826	896	856	742	679	970	570	324	165	208	208	7,955	

All table cells without observations in the inventory sample are indicated by --. Table value of 0 indicates the volume rounds to less than 1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-16.—Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on forest land by forest type group and stand origin, Illinois, 2005

Forest-type group	Stand origin		All forest land
	Natural stands	Artificial regeneration	
White / red / jack pine group	9.2	98.9	108.1
Loblolly / shortleaf pine group	9.0	64.0	73.0
Other eastern softwoods group	17.4	--	17.4
Exotic softwoods group	--	0.6	0.6
Oak / pine group	65.0	7.6	72.6
Oak / hickory group	5,332.7	5.8	5,338.5
Oak / gum / cypress group	52.8	--	52.8
Elm / ash / cottonwood group	2,146.2	4.7	2,150.9
Maple / beech / birch group	136.0	--	136.0
Aspen / birch group	2.1	--	2.1
Exotic hardwoods group	1.3	--	1.3
Nonstocked	1.0	--	1.0
All forest-type groups	7,772.8	181.8	7,954.5

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-17.—Net volume of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and diameter class, Illinois, 2005

Species group	Diameter class (inches)														All classes
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-24.9	25.0-28.9	29.0-32.9	33.0-36.9	37.0+		
Softwood species groups															
Eastern softwood species groups															
Loblolly and shortleaf pines	3	9	13	19	14	4	4	1	3	--	--	--	--	70	
Other yellow pines	1	2	2	--	--	--	--	--	--	--	--	--	--	5	
Eastern white and red pines	4	14	19	21	16	14	7	5	--	5	--	--	--	104	
Jack pine	1	3	1	--	1	--	--	--	--	--	--	--	--	5	
Spruce and balsam fir	1	1	1	1	1	--	--	--	--	--	--	--	--	4	
Cypress	0	0	0	0	--	--	--	2	4	--	--	--	--	7	
Other eastern softwoods	7	7	9	4	4	2	--	2	--	--	--	--	--	34	
All softwoods	16	36	45	45	36	20	10	10	7	5	--	--	--	229	
Hardwood species groups															
Eastern hardwood species groups															
Select white oaks	13	21	40	63	95	114	136	129	225	124	92	21	5	1,076	
Select red oaks	7	8	17	23	31	45	56	46	91	53	12	14	9	412	
Other white oaks	3	7	14	23	18	16	13	15	25	--	--	--	--	134	
Other red oaks	18	28	52	67	118	115	117	66	115	64	26	10	24	819	
Hickory	46	73	90	116	114	103	56	45	43	24	25	--	--	734	
Hard maple	24	25	32	24	35	33	24	17	32	8	6	--	--	260	
Soft maple	17	33	41	54	68	56	70	84	96	55	40	25	9	648	
Beech	0	0	0	0	1	1	2	2	2	--	6	--	--	15	
Sweetgum	6	9	13	11	12	13	4	14	4	2	--	--	--	87	
Tupelo and blackgum	2	3	4	1	4	--	2	2	1	--	--	--	--	20	
Ash	30	41	46	58	52	44	36	32	8	16	11	--	--	374	
Cottonwood and aspen	2	4	10	10	11	22	23	23	44	14	26	46	68	304	
Basswood	4	5	6	8	9	8	7	5	12	--	--	--	--	64	
Yellow-poplar	4	6	9	10	14	7	8	23	33	--	--	--	6	121	
Black walnut	9	18	24	32	33	34	19	18	16	6	--	--	--	210	
Other eastern soft hardwoods	118	141	139	141	115	105	71	60	90	70	17	7	54	1,128	
Other eastern hard hardwoods	19	27	28	31	43	26	16	19	9	18	5	--	--	240	
All hardwoods	323	449	566	672	773	743	659	600	845	454	264	122	175	6,646	
All species groups	339	485	611	717	809	763	669	610	852	459	264	122	175	6,875	

All table cells without observations in the inventory sample are indicated by --. Table value of 0 indicates the volume rounds to less than 1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-18.—Net volume of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and ownership group, Illinois, 2005

Species group	Ownership group				All owners
	Forest Service	Other Federal	State and local government	Undifferentiated private	
Softwood species groups					
Eastern softwood species groups					
Loblolly and shortleaf pines	61.3	--	--	8.6	69.9
Other yellow pines	--	--	0.8	4.6	5.4
Eastern white and red pines	5.5	--	33.1	65.1	103.7
Jack pine	--	--	4.2	1.0	5.2
Spruce and balsam fir	--	--	3.4	1.0	4.3
Cypress	--	--	--	7.0	7.0
Other eastern softwoods	3.5	--	1.8	28.4	33.6
All softwoods	70.2	--	43.2	115.6	229.1
Hardwood species groups					
Eastern hardwood species groups					
Select white oaks	95.9	6.4	83.5	890.4	1,076.2
Select red oaks	44.3	--	28.8	338.9	412.0
Other white oaks	24.1	--	2.6	107.3	133.9
Other red oaks	67.3	11.9	46.2	693.2	818.6
Hickory	69.8	0.6	36.5	626.9	733.8
Hard maple	36.8	1.5	7.9	213.9	260.0
Soft maple	9.5	70.2	56.3	512.3	648.3
Beech	5.7	--	--	9.7	15.4
Sweetgum	13.0	3.5	--	70.6	87.1
Tupelo and blackgum	8.8	--	1.4	10.1	20.2
Ash	11.7	12.5	30.0	319.6	373.8
Cottonwood and aspen	24.7	9.5	31.8	238.0	304.0
Basswood	--	--	2.6	61.2	63.8
Yellow-poplar	43.7	--	7.5	69.9	121.1
Black walnut	5.9	0.1	23.0	180.6	209.6
Other eastern soft hardwoods	32.7	15.1	96.6	983.1	1,127.5
Other eastern hard hardwoods	2.2	10.6	15.3	212.2	240.3
All hardwoods	496.2	141.8	469.9	5,537.8	6,645.7
All species groups	566.4	141.8	513.1	5,653.5	6,874.8

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-19.—Net volume of sawtimber trees, in million board feet (International 1/4-inch rule), on timberland by species group and diameter class, Illinois, 2005

Species group	Diameter class (inches)												All classes
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-24.9	25.0-28.9	29.0-32.9	33.0-36.9	37.0+		
Softwood species groups													
Eastern softwood species groups													
Loblolly and shortleaf pines	66	94	73	23	19	5	17	--	--	--	--	298	
Other yellow pines	11	--	--	--	--	--	--	--	--	--	--	11	
Eastern white and red pines	90	100	80	72	34	24	--	26	--	--	--	426	
Jack pine	5	--	4	--	--	--	--	--	--	--	--	8	
Spruce and balsam fir	4	3	7	--	--	--	--	--	--	--	--	13	
Cypress	1	2	--	--	--	12	18	--	--	--	--	32	
Other eastern softwoods	47	21	17	8	--	8	--	--	--	--	--	102	
All softwoods	224	220	181	103	53	49	35	26	--	--	--	891	
Hardwood species groups													
Eastern hardwood species groups													
Select white oaks	--	309	457	540	634	586	990	521	362	78	16	4,493	
Select red oaks	--	116	156	226	278	226	440	246	52	58	34	1,830	
Other white oaks	--	114	90	79	64	72	122	--	--	--	--	540	
Other red oaks	--	331	585	570	572	320	545	293	112	41	74	3,442	
Hickory	--	569	561	505	273	222	209	116	120	--	--	2,575	
Hard maple	--	117	167	158	115	80	149	37	23	--	--	847	
Soft maple	--	236	299	244	309	369	415	230	161	95	33	2,391	
Beech	--	1	5	6	10	11	7	--	29	--	--	70	
Sweetgum	--	48	54	59	16	62	19	8	--	--	--	264	
Tupelo and blackgum	--	5	17	--	9	9	6	--	--	--	--	46	
Ash	--	264	241	209	170	153	38	73	46	--	--	1,193	
Cottonwood and aspen	--	45	55	108	116	119	227	69	128	208	213	1,287	
Basswood	--	40	43	39	34	25	59	--	--	--	--	239	
Yellow-poplar	--	51	71	39	44	121	171	--	--	--	28	526	
Black walnut	--	153	160	165	88	85	70	28	--	--	--	749	
Other eastern soft hardwoods	--	654	529	484	319	268	401	304	75	24	197	3,256	
Other eastern hard hardwoods	--	142	197	117	73	83	39	78	19	--	--	747	
All hardwoods	--	3,193	3,687	3,547	3,125	2,810	3,906	2,003	1,127	503	595	24,497	
All species groups	224	3,413	3,868	3,650	3,178	2,859	3,941	2,029	1,127	503	595	25,387	

All table cells without observations in the inventory sample are indicated by --. Table value of 0 indicates the volume rounds to less than 1 million board feet. Columns and rows may not add to their totals due to rounding.

Table IL-19a.—Net volume of sawtimber trees, in million board feet (Doyle rule) on timberland by species group and diameter class, Illinois, 2005

Species group	Diameter class (inches)												All classes
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-24.9	25.0-28.9	29.0-32.9	33.0-36.9	37.0+		
Softwood species groups													
Eastern softwood species groups													
Loblolly and shortleaf pines	23	45	44	16	14	5	16	--	--	--	--	162	
Other yellow pines	4	--	--	--	--	--	--	--	--	--	--	4	
Eastern white and red pines	31	48	48	49	26	20	--	25	--	--	--	248	
Jack pine	2	--	2	--	--	--	--	--	--	--	--	4	
Spruce and balsam fir	1	1	4	--	--	--	--	--	--	--	--	7	
Cypress	0	1	--	--	--	10	15	--	--	--	--	27	
Other eastern softwoods	16	10	10	6	--	7	--	--	--	--	--	49	
All softwoods	77	105	108	71	41	42	31	25	--	--	--	500	
Hardwood species groups													
Eastern hardwood species groups													
Select white oaks	--	129	234	318	417	421	796	472	411	89	18	3,303	
Select red oaks	--	48	80	133	183	162	354	222	59	65	38	1,344	
Other white oaks	--	47	46	46	42	52	98	--	--	--	--	332	
Other red oaks	--	138	299	335	376	230	439	265	127	46	84	2,339	
Hickory	--	237	287	297	180	159	168	103	137	--	--	1,567	
Hard maple	--	49	85	93	76	57	121	32	27	--	--	540	
Soft maple	--	99	153	144	203	265	333	207	183	108	37	1,731	
Beech	--	1	3	3	7	8	6	--	33	--	--	60	
Sweetgum	--	20	27	34	10	44	16	7	--	--	--	159	
Tupelo and blackgum	--	2	9	--	6	6	5	--	--	--	--	28	
Ash	--	110	123	123	112	110	30	63	52	--	--	723	
Cottonwood and aspen	--	19	28	64	76	85	185	63	145	236	242	1,142	
Basswood	--	17	22	23	22	18	46	--	--	--	--	148	
Yellow-poplar	--	21	36	23	29	87	138	--	--	--	32	367	
Black walnut	--	64	82	97	58	61	56	24	--	--	--	442	
Other eastern soft hardwoods	--	273	271	284	210	193	319	270	85	27	224	2,157	
Other eastern hard hardwoods	--	59	101	69	48	60	32	69	21	--	--	459	
All hardwoods	--	1,332	1,887	2,086	2,053	2,017	3,141	1,798	1,279	571	676	16,841	
All species groups	77	1,437	1,996	2,158	2,094	2,059	3,172	1,822	1,279	571	676	17,341	

All table cells without observations in the inventory sample are indicated by --. Table value of 0 indicates the volume rounds to less than 1 million board feet. Columns and rows may not add to their totals due to rounding.

Table IL-20.—Net volume of sawtimber trees, in million cubic feet, on timberland by species group and ownership group, Illinois, 2005

Species group	Ownership group				All owners
	Forest Service	Other Federal	State and local government	Undifferentiated private	
Softwood species groups					
Eastern softwood species groups					
Loblolly and shortleaf pines	46.4	--	--	6.2	52.5
Other yellow pines	--	--	0.2	1.6	1.8
Eastern white and red pines	3.3	--	29.3	43.3	75.9
Jack pine	--	--	1.4	--	1.4
Spruce and balsam fir	--	--	2.6	--	2.6
Cypress	--	--	--	6.4	6.4
Other eastern softwoods	1.8	--	1.7	13.6	17.0
All softwoods	51.5	--	35.2	71.0	157.7
Hardwood species groups					
Eastern hardwood species groups					
Select white oaks	75.6	5.9	74.4	754.4	910.2
Select red oaks	38.2	--	25.9	285.0	349.1
Other white oaks	15.7	--	2.4	75.7	93.8
Other red oaks	56.8	10.2	38.0	539.0	644.0
Hickory	41.0	--	25.5	379.5	446.0
Hard maple	22.8	--	3.5	131.8	158.0
Soft maple	7.2	61.7	43.3	390.5	502.8
Beech	4.7	--	--	9.0	13.7
Sweetgum	5.8	0.6	--	43.3	49.8
Tupelo and blackgum	6.4	--	0.9	1.2	8.6
Ash	5.0	6.6	13.2	194.1	218.9
Cottonwood and aspen	22.7	9.2	27.3	215.4	274.6
Basswood	--	--	0.7	42.2	42.9
Yellow-poplar	35.1	--	6.1	52.3	93.5
Black walnut	4.6	--	18.6	108.8	132.0
Other eastern soft hardwoods	16.7	6.7	56.8	551.0	631.2
Other eastern hard hardwoods	0.2	2.2	8.3	129.1	139.9
All hardwoods	358.4	103.1	344.9	3,902.5	4,708.9
All species groups	409.8	103.1	380.1	3,973.5	4,866.6

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-24.—Average annual net growth of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and ownership group, Illinois, 2005

Species group	Ownership group				All owners
	Forest Service	Other Federal	State and local government	Undifferentiated private	
Softwood species groups					
Eastern softwood species groups					
Loblolly and shortleaf pines	1.8	--	--	0.1	1.9
Other yellow pines	--	--	0.1	-0.2	-0.1
Eastern white and red pines	1.0	--	0.7	2.2	3.9
Jack pine	--	--	0.7	0.0	0.7
Spruce and balsam fir	--	--	0.6	0.1	0.6
Other eastern softwoods	0.2	--	0.3	0.3	0.8
All softwoods	3.0	--	2.4	2.4	7.8
Hardwood species groups					
Eastern hardwood species groups					
Select white oaks	2.4	1.1	10.6	28.0	42.1
Select red oaks	3.3	--	4.7	14.9	22.9
Other white oaks	0.5	--	0.1	2.7	3.2
Other red oaks	0.2	2.4	3.5	14.1	20.2
Hickory	1.8	--	6.8	19.4	28.1
Hard maple	1.0	0.1	0.7	9.9	11.9
Soft maple	1.2	-1.0	2.8	34.8	33.7
Beech	0.2	--	--	0.3	0.5
Sweetgum	0.2	0.9	-0.5	3.6	4.2
Tupelo and blackgum	0.1	--	0.0	0.6	0.8
Ash	0.5	1.6	2.7	14.4	19.4
Cottonwood and aspen	--	--	4.8	25.6	30.5
Basswood	--	--	0.4	4.7	5.1
Yellow-poplar	1.7	--	1.2	5.5	8.4
Black walnut	0.0	0.0	0.9	10.1	11.2
Other eastern soft hardwoods	0.8	1.2	10.5	48.5	61.2
Other eastern hard hardwoods	-0.1	0.9	2.1	13.0	15.9
All hardwoods	13.8	7.2	51.4	250.1	319.3
All species groups	16.8	7.2	53.7	252.5	327.1

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-28.—Average annual mortality of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and ownership group, Illinois, 2005

Species group	Ownership group				All owners
	Forest Service	Other Federal	State and local government	Undifferentiated private	
Softwood species groups					
Eastern softwood species groups					
Loblolly and shortleaf pines	0.3	--	--	--	0.3
Other yellow pines	--	--	--	0.6	0.6
Eastern white and red pines	0.0	--	--	0.7	0.7
Jack pine	--	--	--	0.1	0.1
Other eastern softwoods	--	--	--	0.0	0.0
All softwoods	0.3	--	--	1.4	1.8
Hardwood species groups					
Eastern hardwood species groups					
Select white oaks	0.8	--	0.1	1.9	2.8
Select red oaks	0.4	--	0.1	1.4	2.0
Other white oaks	--	--	--	0.9	0.9
Other red oaks	1.8	--	0.4	10.0	12.2
Hickory	0.3	--	0.1	6.0	6.4
Hard maple	0.2	--	--	1.9	2.2
Soft maple	0.0	2.1	0.3	6.2	12.7
Sweetgum	0.1	--	0.7	0.5	1.3
Tupelo and blackgum	0.0	--	--	--	0.0
Ash	--	0.0	0.8	5.1	5.9
Cottonwood and aspen	--	--	0.1	--	0.1
Basswood	--	--	--	0.0	0.0
Yellow-poplar	0.0	--	--	--	0.0
Black walnut	0.0	--	--	1.3	1.3
Other eastern soft hardwoods	0.8	0.3	0.6	30.6	32.5
Other eastern hard hardwoods	0.1	--	0.2	4.2	4.5
All hardwoods	4.7	2.3	3.4	70.0	84.9
All species groups					
	5.1	2.3	3.4	71.5	86.7

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-30.—Average annual removals of growing-stock trees (at least 5 inches d.b.h./d.r.c.), in million cubic feet, on timberland by species group and ownership group, 2005

Species group	Ownership group				All owners
	Forest Service	Other Federal	State and local government	Undifferentiated private	
Softwood species groups					
Eastern softwood species groups					
Other eastern softwoods	--	--	--	--	0.0
All softwoods	--	--	--	--	0.0
Hardwood species groups					
Eastern hardwood species groups					
Select white oaks	--	--	3.8	6.3	10.2
Select red oaks	--	--	--	3.9	4.4
Other white oaks	--	--	--	0.8	0.8
Other red oaks	--	--	3.3	2.6	6.6
Hickory	--	--	2.2	0.4	4.4
Hard maple	--	--	--	0.1	0.9
Soft maple	--	--	--	3.4	3.7
Sweetgum	--	--	2.1	--	2.3
Ash	--	--	2.4	0.8	3.9
Cottonwood and aspen	--	--	--	6.4	8.9
Basswood	--	--	--	0.8	0.8
Yellow-poplar	--	--	--	1.2	1.2
Black walnut	--	--	--	--	1.1
Other eastern soft hardwoods	--	--	0.9	6.2	10.9
Other eastern hard hardwoods	--	--	0.1	0.2	0.5
All hardwoods	--	--	14.8	33.1	60.6
All species groups	--	--	14.8	33.1	60.7

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic feet. Columns and rows may not add to their totals due to rounding.

Table IL-31.—Aboveground dry weight of live trees (at least 1 inch d.b.h/d.r.c.) in thousand dry short tons, by owner class and forest land status, Illinois, 2005

Owner class	Unreserved forests			Reserved forests			All forest land
	Timberland	Unproductive	Total	Productive	Unproductive	Total	
Forest Service							
National forest	15,153	--	15,153	489	--	489	15,642
Other national forest	671	--	671	--	--	--	671
Other Federal							
Fish and Wildlife Service	1,959	--	1,959	536	--	536	2,494
Department of Defense or Energy	624	--	624	--	--	--	624
Other Federal	1,259	--	1,259	--	--	--	1,259
State and local government							
State	7,444	--	7,444	4,336	--	4,336	11,781
Local (county, municipal, etc.)	6,322	--	6,322	3,084	--	3,084	9,406
Private							
Undifferentiated private	174,012	--	174,012	47	--	47	174,059
All owners	207,443	--	207,443	8,493	--	8,493	215,936

All table cells without observations in the inventory sample are indicated by --. Table value of 0 indicates the aboveground tree biomass rounds to less than 1 thousand dry tons. Columns and rows may not add to their totals due to rounding.

Table IL-32.—Aboveground dry weight of live trees (at least 1 inch d.b.h/d.r.c.) in thousand dry short tons, on forest land by species group and diameter class, Illinois, 2005

Species group	Diameter class (inches)																All classes
	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-24.9	25.0-26.9	27.0-28.9	29.0+		
Softwood species groups																	
Eastern softwood species groups																	
Loblolly and shortleaf pines	2	--	60	180	283	375	291	89	70	20	28	36	--	--	--	--	1,434
Other yellow pines	--	15	16	48	56	--	--	--	--	--	--	--	--	--	--	--	134
Eastern white and red pines	0	--	64	249	321	343	253	222	105	71	--	--	77	--	--	--	1,705
Jack pine	--	--	16	51	17	--	13	--	--	--	--	--	--	--	--	--	96
Spruce and balsam fir	--	--	14	9	15	10	24	--	--	--	--	--	--	--	--	--	72
Cypress	--	--	2	4	5	10	--	--	--	49	70	--	--	--	--	--	139
Other eastern softwoods	34	109	159	176	233	85	77	67	20	35	31	--	--	--	--	--	1,026
All softwoods	37	124	330	718	928	823	657	378	195	175	128	36	77	--	--	--	4,606
Hardwood species groups																	
Eastern hardwood species groups																	
Select white oaks	97	372	483	720	1,334	1,926	2,820	3,637	3,991	3,733	3,608	3,057	2,351	1,601	4,998	--	34,728
Select red oaks	27	167	279	292	565	728	900	1,384	1,688	1,249	1,340	1,605	1,177	718	1,060	--	13,127
Other white oaks	7	--	97	222	456	689	575	485	433	599	346	358	--	--	43	--	4,310
Other red oaks	179	694	680	1,065	1,669	2,150	3,466	3,211	3,431	2,087	1,932	1,604	1,279	1,097	2,386	--	26,930
Hickory	356	802	1,723	2,491	3,017	3,743	3,615	3,184	1,878	1,479	861	444	653	137	688	--	25,071
Yellow birch	--	--	5	5	16	--	--	--	--	--	--	--	--	--	--	--	27
Hard maple	386	897	849	794	1,001	798	955	886	700	431	389	423	306	--	137	--	8,952
Soft maple	105	209	600	893	1,055	1,507	1,664	1,450	1,594	2,003	1,355	910	773	470	1,733	--	16,320
Beech	24	11	18	16	13	6	51	27	51	53	--	36	--	--	223	--	529
Sweetgum	60	110	166	205	308	234	341	332	117	287	67	89	113	--	--	--	2,429
Tupelo and blackgum	63	90	68	78	111	47	81	11	42	41	28	30	--	--	--	--	669
Ash	223	610	1,031	1,296	1,476	1,727	1,441	1,233	991	808	438	--	367	--	246	--	11,886
Cottonwood and aspen	8	24	51	82	212	194	254	423	450	515	280	638	221	213	2,381	--	5,945
Basswood	17	83	81	113	104	153	145	150	101	101	178	--	--	--	--	--	1,227
Yellow-poplar	29	54	97	116	189	253	263	200	156	418	306	282	--	--	112	--	2,476
Black walnut	40	92	285	545	683	841	803	988	482	448	269	129	213	--	--	--	5,800
Other eastern soft hardwoods	1,397	3,431	3,673	4,040	3,982	3,873	3,080	2,611	1,804	1,394	1,607	511	1,250	414	1,954	--	35,020
Other eastern hard hardwoods	359	585	906	1,160	1,160	1,110	1,358	899	522	614	140	168	361	108	125	--	9,574
Eastern noncommercial hardwoods	477	1,001	1,079	989	639	567	508	288	165	181	95	--	--	302	--	--	6,290
All hardwoods	3,854	9,234	12,169	15,123	17,990	20,544	22,321	21,328	18,595	16,440	13,238	10,286	9,065	5,061	16,084	--	211,330
All species groups	3,890	9,358	12,499	15,841	18,919	21,367	22,977	21,705	18,790	16,616	13,366	10,322	9,142	5,061	16,084	--	215,936

All table cells without observations in the inventory sample are indicated by --. Table value of 0 indicates the aboveground tree biomass rounds to less

All table cells without observations in the inventory sample are indicated by --. Table value of 0 indicates the aboveground tree biomass rounds to less than 1 thousand dry tons. Columns and rows may not add to their totals due to rounding.

Table IL-54.—Area of forest land, in thousand acres, by inventory unit, county, and forest land status, Illinois, 2005

Inventory unit and county	Unreserved forests			Reserved forests			All forest land
	Timberland	Unproductive	Total	Productive	Unproductive	Total	
Southern							
Alexander	55.0	--	55.0	--	--	--	55.0
Franklin	49.9	--	49.9	--	--	--	49.9
Gallatin	43.3	--	43.3	--	--	--	43.3
Hamilton	65.0	--	65.0	--	--	--	65.0
Hardin	60.8	--	60.8	--	--	--	60.8
Jackson	107.9	--	107.9	--	--	--	107.9
Johnson	93.8	--	93.8	7.6	--	7.6	101.4
Massac	37.0	--	37.0	--	--	--	37.0
Perry	49.9	--	49.9	--	--	--	49.9
Pope	166.1	--	166.1	6.0	--	6.0	172.1
Pulaski	50.0	--	50.0	--	--	--	50.0
Randolph	102.4	--	102.4	--	--	--	102.4
Saline	51.8	--	51.8	3.0	--	3.0	54.8
Union	90.1	--	90.1	16.7	--	16.7	106.7
White	52.6	--	52.6	--	--	--	52.6
Williamson	73.3	--	73.3	7.6	--	7.6	80.8
Total	1,148.8	--	1,148.8	40.8	--	40.8	1,189.6

(Table 54 continued on next page)

(Table 54 continued)

Inventory unit and county	Unreserved forests			Reserved forests			All forest land
	Timberland	Unproductive	Total	Productive	Unproductive	Total	
Claypan							
Bond	44.6	--	44.6	--	--	--	44.6
Calhoun	69.9	--	69.9	--	--	--	69.9
Clark	69.5	--	69.5	--	--	--	69.5
Clay	38.2	--	38.2	--	--	--	38.2
Clinton	20.5	--	20.5	--	--	--	20.5
Washington	42.6	--	42.6	--	--	--	42.6
Crawford	56.1	--	56.1	--	--	--	56.1
Cumberland	7.6	--	7.6	--	--	--	7.6
Jasper	26.1	--	26.1	--	--	--	26.1
Edwards	19.8	--	19.8	--	--	--	19.8
Wabash	0.3	--	0.3	--	--	--	0.3
Effingham	51.2	--	51.2	--	--	--	51.2
Fayette	101.6	--	101.6	--	--	--	101.6
Greene	34.4	--	34.4	--	--	--	34.4
Jefferson	71.5	--	71.5	--	--	--	71.5
Jersey	46.9	--	46.9	10.9	--	10.9	57.8
Lawrence	26.8	--	26.8	4.1	--	4.1	30.9
Macoupin	94.1	--	94.1	--	--	--	94.1
Madison	67.8	--	67.8	--	--	--	67.8
Marion	92.2	--	92.2	--	--	--	92.2
Monroe	42.9	--	42.9	--	--	--	42.9
Montgomery	50.5	--	50.5	--	--	--	50.5
Richland	29.6	--	29.6	--	--	--	29.6
St. Clair	62.9	--	62.9	--	--	--	62.9
Shelby	49.3	--	49.3	--	--	--	49.3
Wayne	69.4	--	69.4	5.8	--	5.8	75.2
Total	1,286.5	--	1,286.5	20.8	--	20.8	1,307.3

(Table 54 continued on next page)

(Table 54 continued)

Inventory unit and county	Unreserved forests			Reserved forests			All forest land
	Timberland	Unproductive	Total	Productive	Unproductive	Total	
Prairie							
Adams	87.0	--	87.0	--	--	--	87.0
BoDeKaMc	69.9	--	69.9	8.2	--	8.2	78.0
Brown	64.9	--	64.9	--	--	--	64.9
Bureau	32.5	--	32.5	--	--	--	32.5
Carroll-Stephenson	74.5	--	74.5	5.6	--	5.6	80.2
Cass	45.5	--	45.5	--	--	--	45.5
ChChDeFolMaMcMoPi	76.2	--	76.2	26.0	--	26.0	102.1
CoDoEd	57.2	--	57.2	--	--	--	57.2
CoDuLaWi	89.2	--	89.2	48.6	--	48.6	137.8
Fulton	127.2	--	127.2	--	--	--	127.2
GrKeLa	56.4	--	56.4	5.9	--	5.9	62.3
Hancock	53.9	--	53.9	--	--	--	53.9
Henderson	45.1	--	45.1	--	--	--	45.1
Henry-Stark	36.9	--	36.9	--	--	--	36.9
Iroquois-Kankakee	39.2	--	39.2	--	--	--	39.2
Jo Daviess	75.0	--	75.0	--	--	--	75.0
Knox-Warren	82.4	--	82.4	--	--	--	82.4
Lee-Whiteside	32.2	--	32.2	--	--	--	32.2
Logan-Tazewell	39.0	--	39.0	--	--	--	39.0
Marshall-Putnam	43.2	--	43.2	--	--	--	43.2
Mason-Menard	42.9	--	42.9	--	--	--	42.9
McDonough	35.6	--	35.6	--	--	--	35.6
Mercer	36.7	--	36.7	--	--	--	36.7
Morgan-Scott	58.0	--	58.0	--	--	--	58.0
Ogle	44.1	--	44.1	--	--	--	44.1
Peoria	62.6	--	62.6	6.3	--	6.3	68.9
Pike	130.4	--	130.4	--	--	--	130.4
Rock Island	46.5	--	46.5	--	--	--	46.5
Sangamon	43.3	--	43.3	--	--	--	43.3
Schuyler	104.8	--	104.8	--	--	--	104.8
Vermilion	40.3	--	40.3	--	--	--	40.3
Winnebago	19.5	--	19.5	--	--	--	19.5
Woodford	35.4	--	35.4	--	--	--	35.4
Total	1,927.8	--	1,927.8	100.6	--	100.6	2,028.3
All counties	4,363.1	--	4,363.1	162.2	--	162.2	4,525.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties

ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Piatt counties

CoDoEd = Coles, Douglas, and Edgar counties

CoDuLaWi = Cook, DuPage, Lake, and Will counties

GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-55.—Area of forest land, in thousand acres, by inventory unit, county, ownership group, and forest-land status, Illinois, 2005

Inventory unit and county	Forest Service			Other Federal			State and local government			Undifferentiated private		
	Timber-land	Other forest land		Timber-land	Other forest land		Timber-land	Other forest land		Timber-land	Other forest land	All forest land
Southern												
Alexander	18.0	--	--	--	--	--	8.7	--	--	28.4	--	55.0
Franklin	--	--	--	--	--	--	11.6	--	--	38.3	--	49.9
Gallatin	10.3	--	--	--	--	--	6.7	--	--	26.2	--	43.3
Hamilton	--	--	--	--	--	--	5.0	--	--	60.0	--	65.0
Hardin	29.1	--	--	--	--	--	--	--	--	31.7	--	60.8
Jackson	33.5	--	--	--	--	--	3.0	--	--	71.4	--	107.9
Johnson	12.9	--	--	--	--	--	7.6	7.6	--	73.3	--	101.4
Massac	3.0	--	--	--	--	--	--	--	--	34.0	--	37.0
Perry	--	--	--	--	--	--	--	--	--	49.9	--	49.9
Pope	108.1	6.0	--	--	--	--	--	--	--	58.0	--	172.1
Pulaski	--	--	--	11.2	--	--	6.1	--	--	32.7	--	50.0
Randolph	--	--	--	--	--	--	12.9	--	--	89.5	--	102.4
Saline	18.0	3.0	--	--	--	--	--	--	--	33.8	--	54.8
Union	37.8	--	--	--	--	--	4.6	16.7	--	47.7	--	106.7
White	--	--	--	--	--	--	--	--	--	52.6	--	52.6
Williamson	--	--	--	18.3	7.6	--	--	--	--	54.9	--	80.8
Total	270.6	9.0	29.6	18.3	7.6	66.3	24.2	782.4	--	1,189.6	--	1,189.6

(Table 55 continued on next page)

(Table 55 continued)

Inventory unit and county	Forest Service				Other Federal			State and local government			Undifferentiated private			All forest land
	Timber-land		Other forest land		Timber-land	Other forest land	Timber-land	Other forest land	Timber-land	Other forest land	Timber-land	Other forest land		
Claypan														
Bond	--	--	--	--	--	--	--	--	--	--	--	44.6	--	44.6
Calhoun	--	--	--	--	14.2	--	--	--	--	--	--	55.7	--	69.9
Clark	--	--	--	--	--	--	10.0	--	--	--	--	59.5	--	69.5
Clay	--	--	--	--	--	--	--	--	--	--	--	38.2	--	38.2
Clinton	--	--	--	--	--	--	--	--	--	--	--	20.5	--	20.5
Washington	--	--	--	--	--	--	--	--	--	--	--	42.6	--	42.6
Crawford	--	--	--	--	--	--	--	--	--	--	--	56.1	--	56.1
Cumberland	--	--	--	--	--	--	--	--	--	--	--	7.6	--	7.6
Jasper	--	--	--	--	--	--	--	--	--	--	--	26.1	--	26.1
Edwards	--	--	--	--	--	--	--	--	--	--	--	19.8	--	19.8
Wabash	--	--	--	--	--	--	--	--	--	--	--	0.3	--	0.3
Effingham	--	--	--	--	--	--	--	--	--	--	--	51.2	--	51.2
Fayette	--	--	--	--	--	--	9.6	--	--	--	--	92.1	--	101.6
Greene	--	--	--	--	--	--	--	--	--	--	--	34.4	--	34.4
Jefferson	--	--	--	--	1.6	--	--	--	--	--	--	70.0	--	71.5
Jersey	--	--	--	--	--	--	9.8	10.9	--	--	--	37.1	--	57.8
Lawrence	--	--	--	--	--	--	6.0	4.1	--	--	--	20.8	--	30.9
Macoupin	--	--	--	--	--	--	--	--	--	--	--	94.1	--	94.1
Madison	--	--	--	--	--	--	6.0	--	--	--	--	61.8	--	67.8
Marion	--	--	--	--	--	--	1.5	--	--	--	--	90.8	--	92.2
Monroe	--	--	--	--	--	--	6.1	--	--	--	--	36.7	--	42.9
Montgomery	--	--	--	--	--	--	3.9	--	--	--	--	46.7	--	50.5
Richland	--	--	--	--	--	--	--	--	--	--	--	29.6	--	29.6
St. Clair	--	--	--	--	--	--	5.5	--	--	--	--	57.5	--	62.9
Shelby	--	--	--	--	9.1	--	--	--	--	--	--	40.2	--	49.3
Wayne	--	--	--	--	--	--	--	--	--	--	5.8	69.4	--	75.2
Total	--	--	--	--	24.9	--	58.3	20.8	--	--	--	1,203.3	--	1,307.3

(Table 55 continued on next page)

(Table 55 continued)

Inventory unit and county	Forest Service			Other Federal			State and local government			Undifferentiated private		
	Timber-land	Other forest land		Timber-land	Other forest land		Timber-land	Other forest land		Timber-land	Other forest land	All forest land
Prairie												
Adams	--	--	--	--	--	--	--	--	--	87.0	--	87.0
BoDeKaMc	--	--	--	--	--	19.5	8.2	--	--	50.4	--	78.0
Brown	--	--	--	--	--	7.1	--	--	--	57.8	--	64.9
Bureau	--	--	--	--	--	--	--	--	--	32.5	--	32.5
Carroll-Stephenson	--	--	--	6.0	--	--	5.6	--	--	68.6	--	80.2
Cass	--	--	--	--	--	7.9	--	--	--	37.6	--	45.5
ChChDeFoLiMaMcMoPi	--	--	--	5.3	--	0.4	19.7	--	6.3	70.4	--	102.1
CoDoEd	--	--	--	--	--	7.9	--	--	--	49.3	--	57.2
CoDuLaWi	7.5	--	--	--	--	46.2	48.6	--	--	35.5	--	137.8
Fulton	--	--	--	--	--	6.3	--	--	--	120.9	--	127.2
GrKela	--	--	--	--	--	1.5	5.9	--	--	55.0	--	62.3
Hancock	--	--	--	--	--	--	--	--	--	53.9	--	53.9
Henderson	--	--	--	--	--	--	--	--	--	45.1	--	45.1
Henry-Stark	--	--	--	--	--	--	--	--	--	36.9	--	36.9
Iroquois-Kankakee	--	--	--	--	--	--	--	--	--	39.2	--	39.2
Jo Daviess	--	--	--	--	--	5.9	--	--	--	69.2	--	75.0
Knox-Warren	--	--	--	--	--	--	--	--	--	82.4	--	82.4
Lee-Whiteside	--	--	--	--	--	5.9	--	--	--	26.3	--	32.2
Logan-Tazewell	--	--	--	--	--	--	--	--	--	39.0	--	39.0
Marshall-Putnam	--	--	--	--	--	2.8	--	--	--	40.4	--	43.2
Mason-Menard	--	--	--	--	--	7.9	--	--	--	35.0	--	42.9
McDonough	--	--	--	--	--	--	--	--	--	35.6	--	35.6
Mercer	--	--	--	--	--	--	--	--	--	36.7	--	36.7
Morgan-Scott	--	--	--	--	--	--	--	--	--	58.0	--	58.0
Ogle	--	--	--	--	--	--	--	--	--	44.1	--	44.1
Peoria	--	--	--	--	--	11.1	6.3	--	--	51.5	--	68.9
Pike	--	--	--	1.1	--	--	--	--	--	129.2	--	130.4
Rock Island	--	--	--	4.0	--	3.6	--	--	--	38.9	--	46.5
Sangamon	--	--	--	--	--	12.9	--	--	--	30.4	--	43.3
Schuyler	--	--	--	--	--	--	--	--	--	104.8	--	104.8
Vermilion	--	--	--	--	--	6.3	--	--	--	34.0	--	40.3
Winnebago	--	--	--	--	--	2.6	--	--	--	16.9	--	19.5
Woodford	--	--	--	--	--	7.1	--	--	--	28.3	--	35.4
Total	7.5	--	--	16.5	--	163.0	94.3	--	--	1,740.8	6.3	2,028.3
All counties	278.1	9.0	--	70.9	7.6	287.5	139.4	--	--	3,726.5	6.3	4,525.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties

ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Piatt counties

CoDoEd = Coles, Douglas, and Edgar counties

CoDuLaWi = Cook, DuPage, Lake, and Will counties

GrKela = Grundy, Kendall, and La Salle counties

Table IL-56a.—Area of forest land, in thousand acres, by inventory unit, county, and forest-type group, Illinois, 2005

Inventory unit and county	Forest-type group														All groups
	White-red-jack pine	Loblolly-shortleaf pin	Other E. softwoods	Exotic softwoods	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood	Maple-beech-birch	Aspen-birch	Hardwoods	Other Hardwoods	Exotic hardwoods	Non-stocked	
Southern															
Alexander	--	--	--	--	--	35.5	2.4	17.2	--	--	--	--	--	--	55.0
Franklin	--	--	--	--	--	39.9	--	10.0	--	--	--	--	--	--	49.9
Gallatin	--	1.8	--	--	--	17.5	--	23.9	--	--	--	--	--	--	43.3
Hamilton	--	--	--	--	--	42.8	--	22.2	--	--	--	--	--	--	65.0
Hardin	--	6.1	--	--	--	50.6	--	0.9	3.1	--	--	--	--	--	60.8
Jackson	--	2.0	--	--	--	78.6	3.0	24.3	--	--	--	--	--	--	107.9
Johnson	--	--	--	--	7.3	69.4	--	15.7	7.3	--	--	--	--	1.7	101.4
Massac	--	--	--	--	3.0	25.0	7.3	1.7	--	--	--	--	--	--	37.0
Perry	--	7.1	--	--	--	30.2	--	12.6	--	--	--	--	--	--	49.9
Pope	3.7	12.0	2.8	--	6.0	121.1	6.7	17.5	2.2	--	--	--	--	--	172.1
Pulaski	--	--	--	--	--	21.9	7.3	20.9	--	--	--	--	--	--	50.0
Randolph	--	--	--	--	6.7	61.1	--	34.6	--	--	--	--	--	--	102.4
Saline	--	0.2	--	--	--	45.9	--	8.7	--	--	--	--	--	--	54.8
Union	--	--	1.6	--	--	93.0	--	6.1	6.0	--	--	--	--	--	106.7
White	--	--	--	--	1.0	25.8	--	19.9	5.9	--	--	--	--	--	52.6
Williamson	--	0.3	3.0	--	--	40.0	--	37.5	--	--	--	--	--	--	80.8
Total	3.7	29.6	7.5	--	24.0	798.2	26.7	273.7	24.6	--	--	--	--	1.7	1,189.6

(Table 56 continued on next page)

(Table 56 continued)

Inventory unit and county	Forest-type group													All groups
	White-red-jack pine	Loblolly-shortleaf pine	Other E. softwoods	Exotic softwoods	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood	Maple-beech-birch	Aspen-birch	Other Hardwoods	Exotic hardwoods	Non-stocked	
Clayton														
Bond	--	--	--	--	--	26.1	--	18.5	--	--	--	--	--	44.6
Calhoun	--	--	--	--	--	38.7	--	25.2	6.0	--	--	--	--	69.9
Clark	--	--	--	--	--	56.1	--	13.3	--	--	--	--	--	69.5
Clay	--	--	--	--	--	32.2	--	6.0	--	--	--	--	--	38.2
Clinton	--	--	--	--	--	6.0	6.0	8.5	--	--	--	--	--	20.5
Washington	--	--	--	--	--	29.6	--	13.0	--	--	--	--	--	42.6
Crawford	--	--	--	--	--	40.8	--	15.2	--	--	--	--	--	56.1
Cumberland	--	--	--	--	--	6.0	--	--	--	--	--	--	1.5	7.6
Jasper	--	--	--	--	--	24.6	--	1.5	--	--	--	--	--	26.1
Edwards	--	--	--	--	--	9.6	--	10.2	--	--	--	--	--	19.8
Wabash	--	--	--	--	--	0.3	--	--	--	--	--	--	--	0.3
Effingham	--	--	--	--	6.0	43.7	--	1.5	--	--	--	--	--	51.2
Fayette	--	--	--	--	--	62.0	--	39.7	--	--	--	--	--	101.6
Greene	--	--	--	--	--	20.8	--	8.5	5.2	--	--	--	--	34.4
Jefferson	--	--	--	--	--	41.3	0.9	29.3	--	--	--	--	--	71.5
Jersey	--	--	--	--	--	56.6	--	1.2	--	--	--	--	--	57.8
Lawrence	--	--	--	--	--	14.4	--	16.5	--	--	--	--	--	30.9
Macoupin	--	--	--	--	--	83.1	--	11.0	--	--	--	--	--	94.1
Madison	--	--	--	--	--	42.4	--	25.4	--	--	--	--	--	67.8
Marion	--	--	--	--	--	70.5	--	21.7	--	--	--	--	--	92.2
Monroe	--	--	--	--	--	24.1	--	18.8	--	--	--	--	--	42.9
Montgomery	--	--	--	--	0.3	43.6	--	--	6.6	--	--	--	--	50.5
Richland	--	--	--	--	--	23.5	--	6.1	--	--	--	--	--	29.6
St. Clair	--	--	--	--	--	32.8	--	30.1	--	--	--	--	--	62.9
Shelby	--	--	--	--	--	44.6	--	4.8	--	--	--	--	--	49.3
Wayne	--	--	--	--	--	36.6	--	32.4	6.1	--	--	--	--	75.2
Total	--	--	--	--	6.4	910.0	7.0	358.6	23.9	--	--	--	1.5	1,307.3

(Table 56 continued on next page)

(Table 56 continued)

Inventory unit and county	Forest-type group													All groups
	White-red-jack pine	Loblolly-shortleaf pine	Other E. softwoods	Exotic softwoods	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood	Maple-beech-birch	Aspen-birch	Other Hardwoods	Exotic hardwoods	Non-stocked	
Prairie														
Adams	--	--	--	--	7.1	73.5	--	6.4	--	--	--	--	--	87.0
BoDeKaMc	5.3	--	--	1.8	--	46.3	--	24.6	--	--	--	--	--	78.0
Brown	--	--	--	--	5.9	50.0	--	7.4	--	--	--	--	1.6	64.9
Bureau	--	--	--	--	--	29.1	--	3.4	--	--	--	--	--	32.5
Carroll-Stephenson	6.7	--	--	--	--	57.4	--	14.6	--	--	--	--	1.5	80.2
Cass	7.1	--	--	--	--	18.7	4.4	13.8	--	--	--	--	1.5	45.5
ChChDeFoLiMaMcMoPi	--	--	--	--	--	54.7	--	47.4	--	--	--	--	--	102.1
CoDoEd	--	--	--	--	--	47.1	--	8.6	--	--	--	--	1.5	57.2
CoDuLaWi	6.3	--	--	--	--	74.5	--	53.9	--	--	--	--	3.1	137.8
Fulton	--	--	--	--	--	117.8	--	9.4	--	--	--	--	--	127.2
GrKeLa	--	--	--	--	--	33.7	--	22.7	5.9	--	--	--	--	62.3
Hancock	--	--	--	--	--	45.1	--	7.4	1.5	--	--	--	--	53.9
Henderson	--	--	--	--	1.2	32.4	--	11.5	--	--	--	--	--	45.1
Henry-Stark	--	--	--	--	--	21.9	--	14.0	0.9	--	--	--	--	36.9
Iroquois-Kankakee	--	--	--	--	--	20.5	--	18.7	--	--	--	--	--	39.2
Jo Daviess	--	--	9.5	--	6.3	43.7	--	6.4	7.7	--	--	--	1.5	75.0
Knox-Warren	--	--	--	--	--	68.2	--	8.4	1.0	--	--	--	4.9	82.4
Lee-Whiteside	3.3	--	--	--	--	15.5	--	12.0	--	--	--	--	1.5	32.2
Logan-Tazewell	--	--	--	--	--	31.6	--	5.9	--	--	--	--	1.5	39.0
Marshall-Putnam	--	--	--	--	--	31.9	--	11.3	--	--	--	--	--	43.2
Mason-Menard	7.9	--	--	--	--	26.0	--	7.5	--	--	--	1.5	--	42.9
McDonough	--	--	--	--	--	35.6	--	--	--	--	--	--	--	35.6
Mercer	5.3	--	--	--	--	24.3	--	7.1	--	--	--	--	--	36.7
Morgan-Scott	--	--	--	--	--	46.1	--	11.9	--	--	--	--	--	58.0
Ogle	4.5	--	--	--	--	39.6	--	--	--	--	--	--	--	44.1
Peoria	--	--	--	--	--	66.5	--	2.4	--	--	--	--	--	68.9
Pike	--	--	--	--	--	106.4	--	24.0	--	--	--	--	--	130.4
Rock Island	--	--	--	--	--	33.7	--	10.3	1.2	1.4	--	--	--	46.5
Sangamon	--	--	--	--	--	19.1	--	24.2	--	--	--	--	--	43.3
Schuyler	--	--	--	--	--	82.1	--	16.9	5.9	--	--	--	--	104.8
Vermilion	--	--	--	--	--	34.9	--	5.3	--	--	--	--	--	40.3
Winnebago	--	--	--	--	--	14.2	--	5.3	--	--	--	--	--	19.5
Woodford	--	--	--	--	--	14.7	--	8.9	11.8	--	--	--	--	35.4
Total	46.4	--	9.5	1.8	20.5	1,457.0	4.4	431.4	36.0	1.4	--	1.5	18.5	2,028.3
All counties	50.2	29.6	17.0	1.8	50.8	3,165.2	38.0	1,063.7	84.4	1.4	--	1.5	21.7	4,525.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties
 ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Platt counties
 CoDoEd = Coles, Douglas, and Edgar counties
 CoDuLaWi = Cook, DuPage, Lake, and Will counties
 GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-57.—Area of timberland, in thousand acres, by inventory unit, county, and stand-size class, Illinois, 2005

Inventory unit and county	Stand-size class				All size classes
	Large diameter	Medium diameter	Small diameter	Nonstocked	
Southern					
Alexander	36.1	16.2	2.8	--	55.0
Franklin	34.9	15.0	--	--	49.9
Gallatin	36.6	6.7	--	--	43.3
Hamilton	23.1	34.0	7.8	--	65.0
Hardin	45.4	15.4	--	--	60.8
Jackson	85.9	11.3	10.7	--	107.9
Johnson	70.1	22.1	--	1.7	93.8
Massac	31.3	4.2	1.4	--	37.0
Perry	35.4	11.0	3.6	--	49.9
Pope	139.4	22.4	4.3	--	166.1
Pulaski	20.8	27.7	1.5	--	50.0
Randolph	68.6	17.5	16.3	--	102.4
Saline	39.2	12.7	--	--	51.8
Union	71.5	18.6	--	--	90.1
White	40.2	12.4	--	--	52.6
Williamson	26.6	41.1	5.6	--	73.3
Total	805.0	288.2	53.9	1.7	1,148.8
(Table 57 continued on next page)					

(Table 57 continued on next page)

(Table 57 continued)

Inventory unit and county	Stand-size class				All size classes
	Large diameter	Medium diameter	Small diameter	Chaparral	Nonstocked
Claypan					
Bond	23.1	15.3	6.1	--	--
Calhoun	63.7	1.3	4.9	--	--
Clark	55.3	6.5	7.6	--	--
Clay	34.1	4.1	--	--	--
Clinton	20.5	--	--	--	--
Washington	26.7	9.9	6.0	--	--
Crawford	50.3	5.8	--	--	--
Cumberland	6.0	--	--	--	1.5
Jasper	11.9	6.1	8.1	--	--
Edwards	9.2	4.0	6.6	--	--
Wabash	--	0.3	--	--	--
Effingham	36.9	14.3	--	--	--
Fayette	67.8	23.6	10.2	--	--
Greene	26.7	--	7.7	--	--
Jefferson	50.1	19.8	1.5	--	--
Jersey	40.1	6.8	--	--	--
Lawrence	15.1	7.3	4.5	--	--
Macoupin	66.1	28.0	--	--	--
Madison	46.7	15.1	6.0	--	--
Marion	57.7	18.4	16.1	--	--
Monroe	35.3	6.4	1.2	--	--
Montgomery	43.6	3.9	3.0	--	--
Richland	13.0	16.6	--	--	--
St. Clair	42.6	1.5	18.8	--	--
Shelby	35.0	12.2	2.2	--	--
Wayne	55.3	12.2	1.9	--	--
Total	933.0	239.5	112.4	--	1.5

(Table 57 continued on next page)

(Table 57 continued)

Inventory unit and county	Stand-size class				All size classes
	Large diameter	Medium diameter	Small diameter	Chaparral	Nonstocked
Prairie					
Adams	51.3	35.5	0.2	--	--
BoDeKaMc	55.1	7.0	7.7	--	--
Brown	44.7	12.6	6.0	--	1.6
Bureau	17.4	15.1	--	--	--
Carroll-Stephenson	48.2	15.5	9.4	--	1.5
Cass	44.0	--	--	--	1.5
ChChDeFoLiMaMcMoPi	49.3	12.7	14.2	--	--
CoDoEd	42.3	13.4	--	--	1.5
CoDuLaWi	70.9	8.6	6.5	--	3.1
Fulton	110.5	16.7	--	--	--
GrKeLa	49.6	5.3	1.5	--	--
Hancock	38.6	4.7	10.6	--	--
Henderson	24.5	20.6	--	--	--
Henry-Stark	23.4	5.0	8.6	--	--
Iroquois-Kankakee	30.1	3.3	5.9	--	--
Jo Daviess	60.5	7.1	6.0	--	1.5
Knox-Warren	54.9	15.6	7.1	--	4.9
Lee-Whiteside	29.2	1.5	--	--	1.5
Logan-Tazewell	17.4	20.1	--	--	1.5
Marshall-Putnam	33.3	2.8	7.1	--	--
Mason-Menard	28.3	7.7	6.9	--	--
McDonough	9.0	13.5	13.1	--	--
Mercer	33.3	0.5	3.0	--	--
Morgan-Scott	33.2	17.7	7.0	--	--
Ogle	27.6	3.6	12.9	--	--
Peoria	51.8	10.9	--	--	--
Pike	115.8	12.6	1.9	--	--
Rock Island	25.8	18.0	2.7	--	--
Sangamon	37.3	6.0	--	--	--
Schuyler	68.6	15.9	20.4	--	--
Vermilion	34.4	5.9	--	--	--
Winnebago	16.9	2.6	--	--	--
Woodford	32.5	2.9	--	--	--
Total	1,409.6	341.2	158.5	--	18.5
All counties	3,147.6	868.9	324.9	--	21.7

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties

ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Piatt counties

CoDoEd = Coles, Douglas, and Edgar counties

CoDuLaWi = Cook, DuPage, Lake, and Will counties

GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-58.—Area of timberland, in thousand acres, by inventory unit, county, and stocking class, Illinois, 2005

Inventory unit and county	Stocking class of growing-stock trees					All classes
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Overstocked	
Southern						
Alexander	--	11.5	23.5	16.3	3.8	55.0
Franklin	--	21.8	6.7	19.4	2.1	49.9
Gallatin	--	--	23.8	19.5	--	43.3
Hamilton	--	18.8	20.2	24.6	1.4	65.0
Hardin	0.1	10.5	28.1	21.2	0.9	60.8
Jackson	--	19.6	31.0	54.7	2.6	107.9
Johnson	1.7	22.8	58.1	11.2	--	93.8
Massac	--	7.6	26.4	3.0	--	37.0
Perry	--	12.2	23.7	7.3	6.7	49.9
Pope	0.5	29.2	49.2	81.7	5.4	166.1
Pulaski	1.0	--	39.0	8.5	1.5	50.0
Randolph	6.7	13.4	38.2	44.0	--	102.4
Saline	1.1	7.3	31.6	11.8	--	51.8
Union	--	15.7	45.6	27.8	0.9	90.1
White	--	5.3	35.4	10.9	1.0	52.6
Williamson	0.3	22.9	21.6	28.4	--	73.3
Total	11.5	218.6	502.1	390.3	26.3	1,148.8

(Table 58 continued on next page)

(Table 58 continued)

Inventory unit and county	Stocking class of growing-stock trees					All classes
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Overstocked	
Claypan						
Bond	--	9.6	26.2	7.7	1.0	44.6
Calhoun	1.3	4.3	34.7	29.7	--	69.9
Clark	--	4.5	42.2	19.3	3.4	69.5
Clay	--	4.1	31.0	3.1	--	38.2
Clinton	--	1.3	12.0	7.2	--	20.5
Washington	--	5.3	18.3	19.0	--	42.6
Crawford	0.6	3.2	29.0	23.2	--	56.1
Cumberland	1.5	--	4.5	--	1.5	7.6
Jasper	--	6.1	1.5	15.0	3.5	26.1
Edwards	--	3.0	7.2	4.5	5.1	19.8
Wabash	--	--	--	--	0.3	0.3
Effingham	--	7.9	23.5	19.8	--	51.2
Fayette	--	7.7	31.4	52.1	10.4	101.6
Greene	7.7	5.2	9.5	10.5	1.5	34.4
Jefferson	--	13.8	25.5	30.6	1.6	71.5
Jersey	--	5.6	34.1	6.0	1.2	46.9
Lawrence	--	11.4	14.2	--	1.2	26.8
Macoupin	--	3.8	65.3	21.4	3.6	94.1
Madison	4.5	16.8	18.3	25.8	2.5	67.8
Marion	7.2	14.9	32.1	33.9	4.1	92.2
Monroe	1.5	15.6	8.8	15.8	1.2	42.9
Montgomery	2.7	17.8	17.0	11.4	1.6	50.5
Richland	--	13.5	16.1	--	--	29.6
St. Clair	--	6.2	41.1	15.7	--	62.9
Shelby	--	7.9	15.4	22.6	3.5	49.3
Wayne	--	16.1	35.0	12.2	6.0	69.4
Total	27.0	205.6	594.0	406.6	53.3	1,286.5

(Table 58 continued on next page)

(Table 58 continued)

Inventory unit and county	Stocking class of growing-stock trees					All classes
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Overstocked	
Prairie						
Adams	8.9	17.7	29.5	30.9	--	87.0
BoDeKaMc	--	16.5	41.9	11.4	--	69.9
Brown	1.6	19.0	23.4	21.0	--	64.9
Bureau	2.1	14.7	8.8	6.9	--	32.5
Carroll-Stephenson	1.5	17.3	49.4	5.9	0.5	74.5
Cass	1.5	4.4	21.0	18.7	--	45.5
ChChDeFoLiMaMcMoPi	7.1	12.1	27.3	26.6	3.1	76.2
CoDoEd	7.4	5.3	13.7	30.7	--	57.2
CoDuLaWi	3.8	20.5	30.4	34.5	--	89.2
Fulton	8.0	39.5	43.2	34.9	1.5	127.2
GrKeLa	1.0	18.8	20.4	14.7	1.5	56.4
Hancock	8.3	10.8	16.4	18.4	--	53.9
Henderson	--	14.7	24.2	6.2	--	45.1
Henry-Stark	0.9	12.8	17.2	5.9	0.1	36.9
Iroquois-Kankakee	--	3.3	4.2	31.8	--	39.2
Jo Daviess	8.3	20.8	36.5	9.5	--	75.0
Knox-Warren	6.3	25.9	26.2	23.9	--	82.4
Lee-Whiteside	2.2	1.8	20.8	7.4	--	32.2
Logan-Tazewell	1.5	18.4	13.0	6.2	--	39.0
Marshall-Putnam	1.3	9.8	13.3	18.8	--	43.2
Mason-Menard	1.5	6.0	19.2	16.2	--	42.9
McDonough	3.1	--	17.5	13.0	2.0	35.6
Mercer	3.1	10.7	15.5	7.5	--	36.7
Morgan-Scott	3.0	11.5	13.3	30.2	--	58.0
Ogle	--	8.0	29.0	7.1	--	44.1
Peoria	--	5.9	42.9	13.9	--	62.6
Pike	1.5	20.8	58.2	48.2	1.7	130.4
Rock Island	--	18.6	17.8	10.2	--	46.5
Sangamon	--	--	28.3	15.0	--	43.3
Schuyler	1.3	17.1	57.1	18.9	10.4	104.8
Vermilion	6.1	5.9	17.5	10.3	0.4	40.3
Winnebago	--	2.6	11.6	5.3	--	19.5
Woodford	--	8.9	20.6	5.9	--	35.4
Total	91.3	420.0	829.2	566.0	21.2	1,927.8
All counties	129.8	844.2	1,925.4	1,362.9	100.8	4,363.1

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the acres round to less than 0.1 thousand acres. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties

ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Piatt counties

CoDoEd = Coles, Douglas, and Edgar counties

CoDuLaWi = Cook, DuPage, Lake, and Will counties

GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-59.—Net volume of growing-stock trees (at least 5 inches d.b.h.), in million cubic feet, and sawtimber trees, in million board feet (International ¼-rule) trees on timberland by inventory unit, county, and major species group, Illinois, 2005

Inventory unit and county	Growing stock						Sawtimber					
	Major species group						Major species group					
	Pine	Other softwoods	hardwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	hardwoods	Soft hardwoods	Hard hardwoods	All species
(In million cubic feet)												
Southern												
Alexander	--	--	34.1	55.6	89.6	89.6	--	--	94.8	196.6	291.4	291.4
Franklin	--	0.1	29.3	51.1	80.5	80.5	--	--	78.1	202.1	280.2	280.2
Gallatin	5.6	0.1	33.2	48.0	86.9	86.9	24.5	--	106.3	197.3	328.2	328.2
Hamilton	--	--	23.8	60.8	84.6	84.6	--	--	58.9	217.7	276.6	276.6
Hardin	14.2	0.3	40.6	62.4	117.6	117.6	61.7	1.0	155.4	236.7	454.7	454.7
Jackson	3.9	0.2	73.6	112.1	189.9	189.9	20.2	--	248.2	452.3	720.8	720.8
Johnson	3.6	7.2	25.9	96.2	132.9	132.9	13.9	24.9	80.5	370.9	490.2	490.2
Massac	3.4	7.0	13.1	37.9	61.5	61.5	15.6	32.5	45.6	160.4	254.0	254.0
Perry	7.5	--	20.3	44.9	72.7	72.7	32.1	--	60.5	165.4	258.0	258.0
Pope	38.4	2.5	68.3	189.7	299.0	299.0	154.1	8.1	241.4	730.8	1,134.4	1,134.4
Pulaski	--	--	46.8	19.6	66.5	66.5	--	--	145.3	42.7	188.0	188.0
Randolph	--	0.7	60.0	100.5	161.2	161.2	--	3.5	206.3	387.0	596.9	596.9
Saline	1.1	0.3	19.8	54.3	75.6	75.6	5.5	--	79.6	203.0	288.1	288.1
Union	--	0.4	79.7	109.4	189.5	189.5	--	1.5	312.5	429.2	743.2	743.2
White	7.2	--	42.9	35.5	85.5	85.5	35.7	--	141.1	117.0	293.8	293.8
Williamson	--	1.4	40.9	49.6	92.0	92.0	--	3.3	110.3	165.0	278.6	278.6
Total	85.0	20.3	652.3	1,127.9	1,885.6	1,885.6	363.2	74.7	2,164.9	4,274.0	6,876.9	6,876.9

(Table 59 continued on next page)

(Table 59 continued)

Inventory unit and county	Growing stock					Sawtimber					
	Major species group				All species	Major species group				All species	
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods		Pine	Other softwoods	Soft hardwoods	Hard hardwoods		
(In million cubic feet)											
(In million board feet)											
Claypan											
Bond	--	--	18.1	29.3	47.5	--	--	--	37.8	108.3	146.1
Calhoun	--	--	88.8	67.3	156.1	--	--	--	353.7	279.3	633.0
Clark	--	--	33.5	79.5	113.0	--	--	--	115.4	326.3	441.7
Clay	--	--	24.6	32.8	57.3	--	--	--	94.8	110.7	205.5
Clinton	--	--	12.9	25.9	38.7	--	--	--	44.0	100.7	144.7
Washington	--	--	9.1	58.2	67.3	--	--	--	13.8	223.7	237.5
Crawford	--	--	44.9	69.1	114.1	--	--	--	146.1	262.0	408.1
Cumberland	--	--	0.5	10.8	11.3	--	--	--	--	45.1	45.1
Jasper	--	--	10.8	30.8	41.5	--	--	--	42.0	125.8	167.8
Edwards	--	--	15.7	8.8	24.6	--	--	--	48.6	31.7	80.3
Wabash	--	--	0.2	1.1	1.3	--	--	--	--	2.9	2.9
Effingham	0.9	1.0	5.2	87.7	94.7	4.2	--	1.3	16.5	328.4	350.4
Fayette	--	--	59.9	110.3	170.2	--	--	--	210.4	415.6	626.0
Greene	--	--	19.5	26.2	45.7	--	--	--	78.0	99.9	177.9
Jefferson	--	--	60.8	76.0	136.8	--	--	--	198.0	274.4	472.3
Jersey	--	--	8.8	62.3	71.0	--	--	--	23.8	248.8	272.6
Lawrence	--	--	25.8	17.4	43.2	--	--	--	93.8	68.4	162.2
Macoupin	--	--	33.4	87.8	121.1	--	--	--	100.4	312.0	412.5
Madison	0.7	0.5	60.8	58.7	120.8	1.5	--	2.7	213.6	244.2	461.9
Marion	--	0.3	50.3	79.0	129.7	--	--	--	188.6	303.2	491.8
Monroe	--	0.6	18.8	43.7	63.1	--	--	3.0	68.1	185.1	256.2
Montgomery	--	--	6.3	49.3	55.6	--	--	--	14.3	200.6	214.8
Richland	--	0.3	7.9	16.1	24.3	--	--	--	7.5	57.3	64.9
St. Clair	--	--	50.1	35.3	85.4	--	--	--	171.4	144.6	316.0
Shelby	--	--	68.3	66.7	135.0	--	--	--	209.3	230.0	439.4
Wayne	--	--	52.7	51.1	103.8	--	--	--	189.7	181.9	371.6
Total	1.6	2.8	787.6	1,281.1	2,073.0	5.6	--	6.9	2,679.6	4,911.0	7,603.2

(Table 59 continued on next page)

(Table 59 continued)

Inventory unit and county	Growing stock					Sawtimber				
	Major species group					Major species group				
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species
	(In million cubic feet)					(In million board feet)				
Prairie										
Adams	--	2.0	27.7	93.4	123.2	--	2.6	88.2	347.3	438.1
BoDeKaMc	7.2	1.1	29.4	58.2	95.9	20.0	--	76.5	234.2	330.7
Brown	--	2.0	11.9	67.3	81.1	--	4.3	23.7	253.4	281.4
Bureau	--	--	13.0	48.4	61.4	--	--	43.4	196.0	239.5
Carroll-Stephenson	11.1	--	21.5	55.2	87.7	31.5	--	64.5	198.4	294.4
Cass	14.7	--	11.5	43.0	69.1	52.7	--	29.8	184.2	266.7
ChChDeFoLiMaMcMoPi	--	--	60.2	73.0	133.2	--	--	215.3	294.3	509.6
CoDoEd	--	--	29.4	81.1	110.5	--	--	108.6	299.4	408.0
CoDuLaWi	8.8	5.1	63.6	84.5	162.0	25.0	21.2	255.5	345.3	646.9
Fulton	--	0.8	48.9	132.6	182.2	--	--	172.7	527.6	700.3
GrKeLa	--	--	37.9	58.0	96.0	--	--	128.9	249.4	378.3
Hancock	--	1.2	7.7	42.6	51.5	--	3.3	16.4	169.0	188.7
Henderson	--	0.3	40.4	30.4	71.1	--	--	159.0	94.3	253.3
Henry-Stark	--	--	16.9	23.9	40.7	--	--	53.7	88.8	142.6
Iroquois-Kankakee	--	--	49.7	56.6	106.3	--	--	185.4	217.3	402.8
Jo Davies	3.1	7.5	25.8	62.7	99.2	7.0	29.4	90.1	270.6	397.0
Knox-Warren	--	--	23.2	84.2	107.4	--	--	62.4	342.6	405.0
Lee-Whiteside	3.9	--	30.0	21.3	55.2	14.7	--	124.1	89.7	228.6
Logan-Tazewell	--	--	12.2	21.6	33.8	--	--	43.4	68.4	111.7
Marshall-Putnam	--	0.8	17.2	44.0	61.9	--	3.7	66.7	179.8	250.2
Mason-Menard	28.8	--	21.0	18.0	67.8	148.3	--	71.6	60.7	280.6
McDonough	--	--	3.9	27.4	31.3	--	--	3.4	70.3	73.8
Mercer	3.1	--	10.0	27.0	40.0	11.3	--	28.0	103.8	143.0
Morgan-Scott	--	--	27.7	56.2	83.9	--	--	86.3	221.4	307.7
Ogle	12.5	0.1	11.4	40.8	64.9	46.8	--	36.4	162.9	246.1
Peoria	0.6	0.1	31.6	60.9	93.2	--	--	93.1	235.0	328.1
Pike	--	0.1	37.9	170.2	208.2	--	--	125.4	673.0	798.4
Rock Island	--	--	46.9	36.5	83.3	--	--	149.6	149.3	298.9
Sangamon	3.7	--	80.0	36.7	120.4	16.9	--	312.0	137.0	465.8
Schuyler	--	0.6	46.7	91.7	139.0	--	--	146.3	358.9	505.2
Vermilion	--	0.3	10.2	53.6	64.1	--	1.5	38.7	205.7	245.9
Winnebago	--	--	12.7	14.1	26.7	--	--	31.6	51.3	82.9
Woodford	--	--	13.7	50.2	63.9	--	--	40.4	216.5	256.9
Total	97.5	21.9	931.6	1,865.2	2,916.1	374.1	66.1	3,170.9	7,296.1	10,907.2
All counties	184.1	45.0	2,371.5	4,274.2	6,874.8	743.0	147.8	8,015.4	16,481.2	25,387.4

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic or board feet. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties

ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Piatt counties

CoDoEd = Coles, Douglas, and Edgar counties

CoDuLaWi = Cook, DuPage, Lake, and Will counties

GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-59a.—Net volume of growing-stock trees (at least 5 inches d.b.h.), in million cubic feet, and sawtimber trees, in million board feet (Doyle rule) on timberland by inventory unit, county, and major species group, Illinois, 2005

Inventory unit and county	Growing stock					Sawtimber						
	Major species group					Major species group						
	Pine	Other softwoods	Soft hardwoods		Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods		Hard hardwoods	All species
(In million cubic feet)												
(In million board feet)												
Southern												
Alexander	--	--	34.1	55.6	89.6	--	--	53.7	160.5	214.2		
Franklin	--	0.1	29.3	51.1	80.5	--	--	46.7	131.9	178.5		
Gallatin	5.6	0.1	33.2	48.0	86.9	13.3	--	68.2	140.1	221.5		
Hamilton	--	--	23.8	60.8	84.6	--	--	34.3	135.1	169.4		
Hardin	14.2	0.3	40.6	62.4	117.6	37.0	0.5	105.0	141.8	284.2		
Jackson	3.9	0.2	73.6	112.1	189.9	11.8	--	165.9	283.6	461.3		
Johnson	3.6	7.2	25.9	96.2	132.9	8.5	11.2	44.3	223.8	287.9		
Massac	3.4	7.0	13.1	37.9	61.5	6.8	26.7	25.1	114.7	173.3		
Perry	7.5	--	20.3	44.9	72.7	14.7	--	34.4	99.8	148.8		
Pope	38.4	2.5	68.3	189.7	299.0	82.7	3.2	171.2	453.8	710.9		
Pulaski	--	--	46.8	19.6	66.5	--	--	84.2	29.6	113.9		
Randolph	--	0.7	60.0	100.5	161.2	--	2.1	154.2	273.1	429.4		
Saline	1.1	0.3	19.8	54.3	75.6	3.4	--	54.7	121.6	179.8		
Union	--	0.4	79.7	109.4	189.5	--	0.5	211.8	292.7	505.0		
White	7.2	--	42.9	35.5	85.5	22.1	--	108.9	69.2	200.2		
Williamson	--	1.4	40.9	49.6	92.0	--	1.1	64.9	102.1	168.1		
Total	85.0	20.3	652.3	1,127.9	1,885.6	200.4	45.4	1,427.4	2,773.3	4,446.5		

(Table 59a continued on next page)

(Table 59a continued)

Inventory unit and county	Growing stock						Sawtimber					
	Major species group					All species	Major species group					
	Pine	Other softwoods	hardwoods	Soft hardwoods	Hard hardwoods		Pine	Other softwoods	hardwoods	Soft hardwoods	Hard hardwoods	All species
(In million cubic feet)												
(In million board feet)												
Claypan												
Bond	--	--	18.1	29.3	47.5	47.5	--	--	24.2	66.1	90.3	90.3
Calhoun	--	--	88.8	67.3	156.1	156.1	--	--	306.3	175.7	482.0	482.0
Clark	--	--	33.5	79.5	113.0	113.0	--	--	98.3	192.0	290.3	290.3
Clay	--	--	24.6	32.8	57.3	57.3	--	--	61.7	80.6	142.3	142.3
Clinton	--	--	12.9	25.9	38.7	38.7	--	--	30.9	63.3	94.2	94.2
Washington	--	--	9.1	58.2	67.3	67.3	--	--	6.6	145.4	152.0	152.0
Crawford	--	--	44.9	69.1	114.1	114.1	--	--	103.1	175.2	278.4	278.4
Cumberland	--	--	0.5	10.8	11.3	11.3	--	--	--	30.2	30.2	30.2
Jasper	--	--	10.8	30.8	41.5	41.5	--	--	41.9	97.4	139.3	139.3
Edwards	--	--	15.7	8.8	24.6	24.6	--	--	33.4	16.6	50.0	50.0
Wabash	--	--	0.2	1.1	1.3	1.3	--	--	--	1.2	1.2	1.2
Effingham	0.9	1.0	5.2	87.7	94.7	94.7	1.4	0.4	10.5	232.3	244.7	244.7
Fayette	--	--	59.9	110.3	170.2	170.2	--	--	146.4	250.3	396.7	396.7
Greene	--	--	19.5	26.2	45.7	45.7	--	--	74.0	66.9	140.9	140.9
Jefferson	--	--	60.8	76.0	136.8	136.8	--	--	161.4	178.8	340.2	340.2
Jersey	--	--	8.8	62.3	71.0	71.0	--	--	13.5	172.6	186.2	186.2
Lawrence	--	--	25.8	17.4	43.2	43.2	--	--	71.8	44.2	116.0	116.0
Macoupin	--	--	33.4	87.8	121.1	121.1	--	--	65.3	187.0	252.3	252.3
Madison	0.7	0.5	60.8	58.7	120.8	120.8	0.5	1.3	145.5	175.3	322.6	322.6
Marion	--	0.3	50.3	79.0	129.7	129.7	--	--	145.7	197.7	343.3	343.3
Monroe	--	0.6	18.8	43.7	63.1	63.1	--	1.8	48.9	114.1	164.8	164.8
Montgomery	--	--	6.3	49.3	55.6	55.6	--	--	6.9	130.7	137.5	137.5
Richland	--	0.3	7.9	16.1	24.3	24.3	--	--	4.4	31.4	35.8	35.8
St. Clair	--	--	50.1	35.3	85.4	85.4	--	--	133.2	95.3	228.5	228.5
Shelby	--	--	68.3	66.7	135.0	135.0	--	--	232.4	139.6	372.0	372.0
Wayne	--	--	52.7	51.1	103.8	103.8	--	--	108.9	109.9	218.8	218.8
Total	1.6	2.8	787.6	1,281.1	2,073.0	2,073.0	1.9	3.5	2,075.1	3,169.7	5,250.3	5,250.3

(Table 59a continued on next page)

(Table 59a continued)

Inventory unit and county	Growing stock					Sawtimber				
	Major species group					Major species group				
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species
(In million cubic feet)										
(In million board feet)										
Prairie										
Adams	--	2.0	27.7	93.4	123.2	--	0.9	55.0	204.6	260.5
BoDeKaMc	7.2	1.1	29.4	58.2	95.9	8.8	--	43.0	205.2	257.0
Brown	--	2.0	11.9	67.3	81.1	--	1.5	11.7	175.4	188.5
Bureau	--	--	13.0	48.4	61.4	--	--	23.3	162.9	186.2
Carroll-Stephenson	11.1	--	21.5	55.2	87.7	13.0	--	35.9	136.4	185.3
Cass	14.7	--	11.5	43.0	69.1	26.2	--	15.7	139.1	181.0
ChChDeFoLiMaMcMoPi	--	--	60.2	73.0	133.2	--	--	163.8	224.5	388.4
CoDoEd	--	--	29.4	81.1	110.5	--	--	97.3	221.0	318.2
CoDuLaWi	8.8	5.1	63.6	84.5	162.0	12.5	13.3	190.3	280.5	496.7
Fulton	--	0.8	48.9	132.6	182.2	--	--	120.4	366.8	487.2
GrKeLa	--	--	37.9	58.0	96.0	--	--	80.5	215.4	295.9
Hancock	--	1.2	7.7	42.6	51.5	--	1.1	8.1	111.7	120.9
Henderson	--	0.3	40.4	30.4	71.1	--	--	112.8	64.1	176.8
Henry-Stark	--	--	16.9	23.9	40.7	--	--	32.7	76.4	109.1
Iroquois-Kankakee	--	--	49.7	56.6	106.3	--	--	175.8	136.3	312.1
Jo Daviess	3.1	7.5	25.8	62.7	99.2	2.7	13.8	50.6	174.8	241.9
Knox-Warren	--	--	23.2	84.2	107.4	--	--	34.2	245.0	279.2
Lee-Whiteside	3.9	--	30.0	21.3	55.2	8.2	--	80.3	61.5	150.1
Logan-Tazewell	--	--	12.2	21.6	33.8	--	--	26.7	43.9	70.6
Marshall-Putnam	--	0.8	17.2	44.0	61.9	--	2.5	45.0	116.0	163.5
Mason-Menard	28.8	--	21.0	18.0	67.8	107.9	--	41.4	33.8	183.1
McDonough	--	--	3.9	27.4	31.3	--	--	1.4	41.5	42.9
Mercer	3.1	--	10.0	27.0	40.0	5.1	--	13.4	67.0	85.5
Morgan-Scott	--	--	27.7	56.2	83.9	--	--	52.2	158.5	210.8
Ogle	12.5	0.1	11.4	40.8	64.9	20.4	--	26.0	142.7	189.0
Peoria	0.6	0.1	31.6	60.9	93.2	--	--	50.6	169.6	220.3
Pike	--	0.1	37.9	170.2	208.2	--	--	86.7	435.4	522.1
Rock Island	--	--	46.9	36.5	83.3	--	--	125.0	126.7	251.7
Sangamon	3.7	--	80.0	36.7	120.4	10.5	--	254.2	83.4	348.0
Schuyler	--	0.6	46.7	91.7	139.0	--	--	114.3	213.9	328.2
Vermilion	--	0.3	10.2	53.6	64.1	--	0.5	22.9	133.6	157.1
Winnebago	--	--	12.7	14.1	26.7	--	--	17.3	46.9	64.3
Woodford	--	--	13.7	50.2	63.9	--	--	23.0	149.4	172.4
Total	97.5	21.9	931.6	1,865.2	2,916.1	215.3	33.8	2,231.4	5,163.8	7,644.3
All counties	184.1	45.0	2,371.5	4,274.2	6,874.8	417.6	82.7	5,733.8	11,106.9	17,341.1

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic or board feet. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties

ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Piatt counties

CoDoEd = Coles, Douglas, and Edgar counties

CoDuLaWi = Cook, DuPage, Lake, and Will counties

GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-60.—Average annual net growth of growing-stock trees (at least 5 inches d.b.h.), in million cubic feet, and sawtimber trees, in million board feet (International ¼-rule) on timberland by inventory unit, county, and major species group, Illinois, 2005

Inventory unit and county	Growing stock					Sawtimber				
	Major species group					Major species group				
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species
(In million cubic feet)										
Southern	(In million board feet)									
Alexander	--	--	3.5	0.9	4.4	--	--	7.7	-0.4	7.3
Franklin	--	--	1.1	1.2	2.2	--	--	2.4	6.0	8.4
Gallatin	0.2	0.0	1.9	4.9	6.9	1.2	--	6.5	26.1	33.8
Hamilton	--	--	1.6	3.2	4.7	--	--	6.5	14.6	21.1
Hardin	--	--	0.9	0.1	1.0	--	--	3.5	0.7	4.2
Jackson	0.3	0.0	3.3	3.8	7.4	1.4	--	12.5	16.4	30.3
Johnson	0.2	0.4	1.7	1.3	3.7	1.2	2.0	7.2	2.2	12.7
Massac	0.2	--	0.0	0.3	0.6	1.7	--	--	1.5	3.2
Perry	--	--	1.1	0.1	1.2	--	--	2.7	-0.1	2.6
Pope	2.2	0.1	2.6	3.5	8.4	13.0	0.8	8.8	12.8	35.3
Pulaski	--	--	3.0	2.1	5.0	--	--	11.2	4.2	15.4
Randolph	--	-0.1	4.6	4.1	8.6	--	-0.2	17.4	18.7	35.8
Saline	--	0.0	1.4	1.5	2.9	--	--	6.6	7.8	14.4
Union	--	-0.3	2.2	6.3	8.2	--	-1.1	12.6	27.9	39.5
White	--	--	2.7	0.4	3.1	--	--	10.5	2.6	13.1
Williamson	--	-0.1	4.6	3.7	8.2	--	--	15.4	14.2	29.6
Total	3.0	0.2	36.1	37.3	76.6	18.6	1.4	131.3	155.3	306.6

(Table 60 continued on next page)

(Table 60 continued)

Inventory unit and county	Growing stock					Sawtimber						
	Major species group					Major species group						
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species		
(In million cubic feet)												
(In million board feet)												
Claypan												
Bond	--	--	0.9	-0.1	0.8	--	--	2.9	-0.5	2.4		
Calhoun	--	--	4.7	1.8	6.5	--	--	17.8	9.8	27.6		
Clark	--	--	-1.1	2.6	1.5	--	--	-2.8	17.5	14.6		
Clay	--	--	0.0	0.5	0.5	--	--	--	-1.0	-1.0		
Clinton	--	--	-2.5	0.2	-2.3	--	--	-8.2	0.8	-7.4		
Washington	--	-0.1	-1.4	2.0	0.6	--	--	-4.7	6.7	1.9		
Crawford	--	--	0.7	0.8	1.5	--	--	0.8	4.3	5.2		
Cumberland	--	--	0.0	0.5	0.6	--	--	--	3.0	3.0		
Jasper	--	--	-1.7	0.5	-1.2	--	--	-7.7	1.0	-6.6		
Edwards	--	--	1.1	0.4	1.5	--	--	3.8	1.3	5.2		
Wabash	--	--	0.0	0.1	0.1	--	--	--	0.2	0.2		
Effingham	0.2	-0.2	0.5	-0.9	-0.4	1.1	0.0	2.1	-8.0	-4.8		
Fayette	--	--	3.8	2.8	6.6	--	--	11.2	8.9	20.0		
Greene	--	--	1.3	1.2	2.4	--	--	5.0	9.3	14.2		
Jefferson	--	--	3.7	1.0	4.6	--	--	11.3	4.2	15.5		
Jersey	--	--	1.0	5.8	6.8	--	--	4.2	23.6	27.8		
Lawrence	--	--	0.2	0.5	0.7	--	--	1.3	1.9	3.2		
Macoupin	--	--	1.7	5.5	7.2	--	--	5.6	21.9	27.5		
Madison	-0.3	0.0	6.7	4.8	11.2	1.0	0.0	24.3	19.4	44.7		
Marion	--	-0.1	4.2	7.3	11.3	--	-0.9	14.6	30.3	44.1		
Monroe	--	0.0	0.0	0.1	0.1	--	0.2	--	4.0	4.2		
Montgomery	--	--	-0.2	3.3	3.1	--	--	-1.0	17.6	16.6		
Richland	--	--	0.9	1.0	1.9	--	--	-0.8	3.0	2.2		
St. Clair	--	--	5.0	-0.1	4.9	--	--	15.9	-0.6	15.3		
Shelby	--	--	13.9	2.5	16.5	--	--	30.6	10.6	41.2		
Wayne	--	--	1.0	0.5	1.5	--	--	8.5	0.3	8.9		
Total	0.0	-0.4	44.5	44.5	88.6	2.1	-0.7	134.5	189.7	325.6		
(Table 60 continued on next page)												

(Table 60 continued on next page)

(Table 60 continued)

Inventory unit and county	Growing stock						Sawtimber					
	Major species group						Major species group					
	Pine	Other softwoods	hardwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	
(In million cubic feet)												
(In million board feet)												
Prairie												
Adams	--	0.2	0.9	1.8		2.8	--	--	3.5	10.5	14.0	
BoDeKaMc	0.5	0.1	2.8	7.8		11.1	2.4	--	7.1	30.0	39.5	
Brown	--	0.3	0.8	2.5		3.7	--	0.8	0.3	10.6	11.7	
Bureau	--	--	1.1	5.8		6.9	--	--	6.0	23.9	29.9	
Carroll-Stephenson	--	--	1.1	-0.1		1.0	--	--	5.0	-4.2	0.7	
Cass	--	--	1.3	2.0		3.4	--	--	3.4	7.6	11.0	
ChChDeFoLiMaMcMoPi	--	--	3.4	2.5		5.9	--	--	7.0	8.0	15.0	
CoDoEd	--	--	2.0	10.3		12.3	--	--	4.7	42.7	47.3	
CoDuLaWi	1.5	0.9	5.9	13.6		21.8	4.2	3.5	19.5	55.0	82.2	
Fulton	--	0.0	1.4	5.3		6.7	--	--	3.3	20.0	23.3	
GrKeLa	--	--	3.1	5.5		8.5	--	--	9.6	23.4	33.0	
Hancock	--	0.0	1.0	1.9		2.9	--	--	1.6	6.6	8.2	
Henderson	--	0.1	0.0	2.0		2.0	--	--	0.0	6.1	6.1	
Henry-Stark	--	--	1.2	-0.7		0.5	--	--	3.4	-2.6	0.8	
Iroquois-Kankakee	--	--	8.9	1.8		10.7	--	--	35.2	8.6	43.8	
Jo Daviess	0.8	--	0.9	5.5		7.2	1.8	--	-1.6	21.8	22.0	
Knox-Warren	--	--	1.6	0.6		2.2	--	--	5.8	1.7	7.5	
Lee-Whiteside	0.4	0.0	0.7	3.2		4.3	2.1	--	1.2	13.0	16.2	
Logan-Tazewell	--	--	1.0	1.7		2.7	--	--	2.4	4.0	6.3	
Marshall-Putnam	--	--	0.5	0.6		1.1	--	--	-0.3	3.9	3.6	
Mason-Menard	--	--	1.1	0.9		2.0	--	--	7.5	3.5	11.0	
McDonough	--	--	0.5	0.2		0.7	--	--	1.3	-2.9	-1.7	
Mercer	-0.4	0.0	0.2	0.7		0.5	-0.3	--	1.8	3.0	4.6	
Morgan-Scott	--	--	1.8	1.1		2.9	--	--	10.2	4.2	14.4	
Ogle	0.3	--	1.8	2.0		4.1	2.0	--	7.0	9.3	18.4	
Peoria	0.0	0.0	2.1	-3.1		-1.0	--	--	5.5	-12.5	-6.9	
Pike	--	--	1.0	3.8		4.8	--	--	6.8	14.7	21.6	
Rock Island	--	--	0.5	-2.5		-2.0	--	--	-2.5	-11.9	-14.4	
Sangamon	0.3	--	9.2	1.4		10.9	1.7	--	34.9	5.1	41.6	
Schuyler	--	0.1	0.6	3.5		4.3	--	--	1.8	11.4	13.2	
Vermilion	--	0.0	0.8	6.9		7.7	--	0.3	3.2	32.7	36.1	
Winnebago	--	--	1.4	1.4		2.9	--	--	0.5	4.2	4.7	
Woodford	--	--	2.9	3.5		6.4	--	--	8.8	15.2	24.0	
Total	3.4	1.6	63.6	93.3		161.9	13.8	4.6	203.5	366.6	588.5	
All counties	6.4	1.4	144.1	175.1		327.1	34.5	5.3	469.4	711.6	1,220.8	

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic or board feet. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties

ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Piatt counties

CoDoEd = Coles, Douglas, and Edgar counties

CoDuLaWi = Cook, DuPage, Lake, and Will counties

GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-60a.—Average annual net growth of growing stock trees (at least 5 inches d.b.h.), in million cubic feet, and sawtimber, in million board feet (Doyle rule) on timberland by inventory unit, county, and major species group, Illinois, 2005

Inventory unit and county	Growing stock						Sawtimber					
	Major species group			All species			Major species group			All species		
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Hardwoods	species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Hardwoods	species
(In million cubic feet)												
Southern												
Alexander	--	--	3.5	0.9	0.9	4.4	--	--	4.6	0.2	4.8	4.8
Franklin	--	--	1.1	1.2	1.2	2.2	--	--	1.5	3.6	5.1	5.1
Gallatin	0.2	0.0	1.9	4.9	4.9	6.9	0.7	--	3.3	14.0	18.0	18.0
Hamilton	--	--	1.6	3.2	3.2	4.7	--	--	3.8	9.1	12.9	12.9
Hardin	--	--	0.9	0.1	0.1	1.0	--	--	2.6	0.2	2.7	2.7
Jackson	0.3	0.0	3.3	3.8	3.8	7.4	0.9	--	7.2	9.5	17.6	17.6
Johnson	0.2	0.4	1.7	1.3	1.3	3.7	0.7	0.9	3.8	0.1	5.5	5.5
Massac	0.2	--	0.0	0.3	0.3	0.6	0.7	--	--	1.1	1.8	1.8
Perry	--	--	1.1	0.1	0.1	1.2	--	--	1.4	-0.5	0.9	0.9
Pope	2.2	0.1	2.6	3.5	3.5	8.4	6.5	0.3	6.4	7.8	21.0	21.0
Pulaski	--	--	3.0	2.1	2.1	5.0	--	--	6.0	2.4	8.4	8.4
Randolph	--	-0.1	4.6	4.1	4.1	8.6	--	0.0	15.5	10.6	26.1	26.1
Saline	--	0.0	1.4	1.5	1.5	2.9	--	--	3.6	4.0	7.6	7.6
Union	--	-0.3	2.2	6.3	6.3	8.2	--	-0.9	8.5	18.6	26.2	26.2
White	--	--	2.7	0.4	0.4	3.1	--	--	6.5	0.4	6.9	6.9
Williamson	--	-0.1	4.6	3.7	3.7	8.2	--	--	8.2	8.8	17.0	17.0
Total	3.0	0.2	36.1	37.3	37.3	76.6	9.5	0.2	83.0	89.9	182.5	182.5

(Table 60a continued on next page)

(Table 60a continued)

Inventory unit and county	Growing stock					Sawtimber						
	Major species group					Major species group						
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Hard species	All species
(In million cubic feet)												
Claypan												
Bond	--	--	0.9	-0.1	0.8	--	--	1.8	-0.1	1.7		1.7
Calhoun	--	--	4.7	1.8	6.5	--	--	16.5	5.8	22.4		22.4
Clark	--	--	-1.1	2.6	1.5	--	--	-7.0	6.8	-0.2		-0.2
Clay	--	--	0.0	0.5	0.5	--	--	--	-1.1	-1.1		-1.1
Clinton	--	--	-2.5	0.2	-2.3	--	--	-10.0	0.4	-9.6		-9.6
Washington	--	-0.1	-1.4	2.0	0.6	--	--	-4.7	4.0	-0.7		-0.7
Crawford	--	--	0.7	0.8	1.5	--	--	0.4	2.0	2.5		2.5
Cumberland	--	--	0.0	0.5	0.6	--	--	--	1.5	1.5		1.5
Jasper	--	--	-1.7	0.5	-1.2	--	--	-7.0	0.7	-6.3		-6.3
Edwards	--	--	1.1	0.4	1.5	--	--	2.6	0.6	3.1		3.1
Wabash	--	--	0.0	0.1	0.1	--	--	--	0.1	0.1		0.1
Efingham	0.2	-0.2	0.5	-0.9	-0.4	0.4	-0.1	1.0	-11.7	-10.4		-10.4
Fayette	--	--	3.8	2.8	6.6	--	--	6.9	4.4	11.3		11.3
Greene	--	--	1.3	1.2	2.4	--	--	4.3	4.5	8.8		8.8
Jefferson	--	--	3.7	1.0	4.6	--	--	7.6	2.7	10.2		10.2
Jersey	--	--	1.0	5.8	6.8	--	--	2.7	16.5	19.1		19.1
Lawrence	--	--	0.2	0.5	0.7	--	--	0.6	1.3	1.9		1.9
Macoupin	--	--	1.7	5.5	7.2	--	--	3.1	14.7	17.8		17.8
Madison	-0.3	0.0	6.7	4.8	11.2	0.3	0.0	15.9	12.4	28.7		28.7
Marion	--	-0.1	4.2	7.3	11.3	--	-0.6	9.7	23.5	32.6		32.6
Monroe	--	0.0	0.0	0.1	0.1	--	0.1	--	-2.5	-2.4		-2.4
Montgomery	--	--	-0.2	3.3	3.1	--	--	-0.7	9.4	8.7		8.7
Richland	--	--	0.9	1.0	1.9	--	--	-0.6	1.5	0.9		0.9
St. Clair	--	--	5.0	-0.1	4.9	--	--	15.8	-0.7	15.1		15.1
Shelby	--	--	13.9	2.5	16.5	--	--	33.8	5.7	39.5		39.5
Wayne	--	--	1.0	0.5	1.5	--	--	-2.2	0.3	-1.9		-1.9
Total	0.0	-0.4	44.5	44.5	88.6	0.7	-0.6	90.6	102.6	193.3		193.3

(Table 60a continued on next page)

(Table 60a continued)

Inventory unit and county	Growing stock					Sawtimber				
	Major species group					Major species group				
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species
(In million cubic feet)										
(In million board feet)										
Prairie										
Adams	--	0.2	0.9	1.8	2.8	--	--	2.2	4.8	7.0
BoDeKaMc	0.5	0.1	2.8	7.8	11.1	1.0	--	3.6	32.6	37.3
Brown	--	0.3	0.8	2.5	3.7	--	0.3	0.1	6.7	7.1
Bureau	--	--	1.1	5.8	6.9	--	--	3.0	18.2	21.2
Carroll-Stephenson	--	--	1.1	-0.1	1.0	--	--	2.4	-6.2	-3.8
Cass	--	--	1.3	2.0	3.4	--	--	1.8	4.8	6.6
ChChDeFoLiMaMcMoPi	--	--	3.4	2.5	5.9	--	--	4.2	5.7	9.9
CoDoEd	--	--	2.0	10.3	12.3	--	--	3.8	33.8	37.6
CoDuLaWi	1.5	0.9	5.9	13.6	21.8	2.1	2.2	16.7	44.7	65.7
Fulton	--	0.0	1.4	5.3	6.7	--	--	3.3	12.0	15.3
GrKeLa	--	--	3.1	5.5	8.5	--	--	5.7	18.8	24.5
Hancock	--	0.0	1.0	1.9	2.9	--	--	1.0	3.3	4.2
Henderson	--	0.1	0.0	2.0	2.0	--	--	0.3	3.5	3.8
Henry-Stark	--	--	1.2	-0.7	0.5	--	--	1.8	-4.2	-2.4
Iroquois-Kankakee	--	--	8.9	1.8	10.7	--	--	33.5	5.3	38.8
Jo Daviess	0.8	--	0.9	5.5	7.2	0.7	--	-1.0	15.4	15.2
Knox-Warren	--	--	1.6	0.6	2.2	--	--	3.4	-0.6	2.8
Lee-Whiteside	0.4	0.0	0.7	3.2	4.3	1.2	--	0.9	8.5	10.6
Logan-Tazewell	--	--	1.0	1.7	2.7	--	--	1.0	1.8	2.7
Marshall-Putnam	--	--	0.5	0.6	1.1	--	--	-0.1	1.8	1.8
Mason-Menard	--	--	1.1	0.9	2.0	--	--	4.4	1.7	6.1
McDonough	--	--	0.5	0.2	0.7	--	--	0.5	-3.1	-2.5
Mercer	-0.4	0.0	0.2	0.7	0.5	-0.1	--	0.9	1.9	2.7
Morgan-Scott	--	--	1.8	1.1	2.9	--	--	5.8	2.0	7.7
Ogle	0.3	--	1.8	2.0	4.1	0.8	--	5.9	7.2	13.9
Peoria	0.0	0.0	2.1	-3.1	-1.0	--	--	2.6	-17.4	-14.8
Pike	--	--	1.0	3.8	4.8	--	--	3.7	6.7	10.4
Rock Island	--	--	0.5	-2.5	-2.0	--	--	-2.9	-10.2	-13.1
Sangamon	0.3	--	9.2	1.4	10.9	0.9	--	27.1	2.6	30.6
Schuyler	--	0.1	0.6	3.5	4.3	--	--	1.1	5.8	7.0
Vermilion	--	0.0	0.8	6.9	7.7	--	0.1	1.5	21.6	23.2
Winnebago	--	--	1.4	1.4	2.9	--	--	0.3	4.1	4.4
Woodford	--	--	2.9	3.5	6.4	--	--	5.3	8.8	14.1
Total	3.4	1.6	63.6	93.3	161.9	6.6	2.6	143.8	242.4	395.4
All counties	6.4	1.4	144.1	175.1	327.1	16.8	2.2	317.3	434.9	771.3

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic or board feet. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties

ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Piatt counties

CoDoEd = Coles, Douglas, and Edgar counties

CoDuLaWi = Cook, DuPage, Lake, and Will counties

GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-61.—Average annual removals of growing stock trees (at least 5 inches d.b.h.) in million board feet, and sawtimber trees, in million board feet (International ¼-rule) on timberland by inventory unit, county, and major species group, Illinois, 2005

Inventory unit and county	Growing stock					Sawtimber				
	Major species group					Major species group				
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species
(In million cubic feet)										
(In million board feet)										
Southern										
Jackson	--	--	1.2	--	1.2	--	--	6.4	--	6.4
Massac	--	--	0.0	--	0.0	--	--	--	--	--
Perry	--	--	0.2	0.0	0.2	--	--	--	--	--
Pulaski	--	--	0.6	--	0.6	--	--	1.5	--	1.5
Randolph	--	--	--	0.1	0.1	--	--	--	--	--
Union	--	--	2.1	1.0	3.1	--	--	9.3	4.7	14.0
White	--	--	4.8	0.2	5.0	--	--	24.3	1.0	25.3
Total	--	--	8.9	1.3	10.2	--	--	41.5	5.7	47.2
Claypan										
Clark	--	--	--	1.6	1.6	--	--	--	7.4	7.4
Washington	--	--	0.1	1.4	1.6	--	--	0.6	5.7	6.4
Jasper	--	--	0.0	--	0.0	--	--	--	--	--
Edwards	--	--	--	0.3	0.3	--	--	--	1.2	1.2
Effingham	--	--	0.8	2.6	3.4	--	--	3.1	8.5	11.7
Fayette	--	--	3.4	--	3.4	--	--	15.3	--	15.3
Greene	--	--	0.0	0.6	0.7	--	--	--	1.9	1.9
Jefferson	--	--	0.6	2.8	3.4	--	--	2.8	12.8	15.6
Macoupin	--	--	0.0	0.1	0.1	--	--	--	--	--
Madison	--	--	0.9	0.5	1.4	--	--	4.0	1.2	5.2
St. Clair	--	--	1.7	--	1.7	--	--	8.4	--	8.4
Shelby	--	--	--	0.0	0.0	--	--	--	--	--
Wayne	--	--	1.1	7.9	9.1	--	--	5.0	32.2	37.2
Total	--	--	8.9	17.8	26.7	--	--	39.2	71.0	110.2

(Table 61 continued on next page)

(Table 61 continued)

Inventory unit and county	Growing stock					Sawtimber				
	Major species group				All species	Major species group				
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods		Pine	Other softwoods	Soft hardwoods	Hard hardwoods	
(In million cubic feet)										
(In million board feet)										
Prairie										
Adams	--	--	--	0.5	0.5	--	--	--	2.5	2.5
BoDeKaMc	--	--	0.8	2.0	2.8	--	--	2.0	8.5	10.5
GrKeLa	--	--	0.5	4.9	5.4	--	--	1.6	18.9	20.5
Hancock	--	--	0.3	0.2	0.5	--	--	1.3	0.4	1.7
Henderson	--	--	0.0	--	0.0	--	--	--	--	--
Henry-Stark	--	--	1.0	0.1	1.2	--	--	2.2	--	2.2
Jo Daviess	--	--	1.8	--	1.8	--	--	6.9	--	6.9
Lee-Whiteside	--	0.0	1.8	--	1.8	--	--	4.3	--	4.3
Marshall-Putnam	--	--	--	2.2	2.2	--	--	--	8.9	8.9
Mason-Menard	--	--	0.7	--	0.7	--	--	2.9	--	2.9
Pike	--	--	--	0.6	0.6	--	--	--	3.1	3.1
Schuyler	--	--	3.1	3.2	6.3	--	--	14.4	14.2	28.6
Total	--	0.0	10.0	13.8	23.8	--	--	35.6	56.5	92.1
All counties	--	0.0	27.7	32.9	60.7	--	--	116.3	133.2	249.5

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic or board feet. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties
 ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Platt counties
 CoDoEd = Coles, Douglas, and Edgar counties
 CoDuLaWi = Cook, DuPage, Lake, and Will counties
 GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-61a.—Average annual removals of growing stock trees (at least 5 inches d.b.h.) in million board feet, and sawtimber trees, in million board feet (Doyle rule) on timberland by inventory unit, county, and major species group, Illinois, 2005

Inventory unit and county	Growing stock						Sawtimber					
	Major species group			All species			Major species group					
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Hardwoods	Hardwoods	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Hardwoods	All species
(In million cubic feet)												
(In million board feet)												
Southern												
Jackson	--	--	1.2	--	--	1.2	--	--	4.6	--	--	4.6
Massac	--	--	0.0	--	--	0.0	--	--	--	--	--	--
Perry	--	--	0.2	0.0	--	0.2	--	--	--	--	--	--
Pulaski	--	--	0.6	--	--	0.6	--	--	0.8	--	--	0.8
Randolph	--	--	--	0.1	--	0.1	--	--	--	--	--	--
Union	--	--	2.1	1.0	--	3.1	--	--	6.8	3.3	--	10.1
White	--	--	4.8	0.2	--	5.0	--	--	16.8	0.4	--	17.2
Total	--	--	8.9	1.3	--	10.2	--	--	28.9	3.7	--	32.7
Claypan												
Clark	--	--	--	1.6	--	1.6	--	--	--	5.3	--	5.3
Washington	--	--	0.1	1.4	--	1.6	--	--	0.3	5.0	--	5.2
Jasper	--	--	0.0	--	--	0.0	--	--	--	--	--	--
Edwards	--	--	--	0.3	--	0.3	--	--	--	0.8	--	0.8
Effingham	--	--	0.8	2.6	--	3.4	--	--	2.2	4.7	--	6.9
Fayette	--	--	3.4	--	--	3.4	--	--	10.2	--	--	10.2
Greene	--	--	0.0	0.6	--	0.7	--	--	--	1.1	--	1.1
Jefferson	--	--	0.6	2.8	--	3.4	--	--	1.4	11.2	--	12.6
Macoupin	--	--	0.0	0.1	--	0.1	--	--	--	--	--	--
Madison	--	--	0.9	0.5	--	1.4	--	--	3.0	0.6	--	3.5
St. Clair	--	--	1.7	--	--	1.7	--	--	7.0	--	--	7.0
Shelby	--	--	--	0.0	--	0.0	--	--	--	--	--	--
Wayne	--	--	1.1	7.9	--	9.1	--	--	3.3	24.0	--	27.3
Total	--	--	8.9	17.8	--	26.7	--	--	27.4	52.7	--	80.0

(Table 61a continued on next page)

(Table 61a continued)

Inventory unit and county	Growing stock						Sawtimber					
	Major species group					All species	Major species group					
	Pine	Other softwoods	hardwoods	Soft hardwoods	Hard hardwoods		Pine	Other softwoods	hardwoods	Soft hardwoods	Hard hardwoods	
(In million cubic feet)												
(In million board feet)												
Prairie												
Adams	--	--	--	--	0.5	0.5	--	--	--	--	1.4	1.4
BoDeKaMc	--	--	0.8	2.0	2.8	2.8	--	--	0.5	7.6	8.1	8.1
GrKeLa	--	--	0.5	4.9	5.4	5.4	--	--	1.3	12.8	14.0	14.0
Hancock	--	--	0.3	0.2	0.5	0.5	--	--	0.8	0.2	1.0	1.0
Henderson	--	--	0.0	--	0.0	0.0	--	--	--	--	--	--
Henry-Stark	--	--	1.0	0.1	1.2	1.2	--	--	0.9	--	--	0.9
Jo Daviess	--	--	1.8	--	1.8	1.8	--	--	5.8	--	--	5.8
Lee-Whiteside	--	0.0	1.8	--	1.8	1.8	--	--	2.5	--	--	2.5
Marshall-Putnam	--	--	--	2.2	2.2	2.2	--	--	--	3.6	3.6	3.6
Mason-Menard	--	--	0.7	--	0.7	0.7	--	--	2.0	--	--	2.0
Pike	--	--	--	0.6	0.6	0.6	--	--	--	2.1	2.1	2.1
Schuyler	--	--	3.1	3.2	6.3	6.3	--	--	12.5	10.6	23.1	23.1
Total	--	0.0	10.0	13.8	23.8	23.8	--	--	26.4	38.2	64.7	64.7
All counties												
	--	0.0	27.7	32.9	60.7	60.7	--	--	82.7	94.6	177.4	177.4

All table cells without observations in the inventory sample are indicated by --. Table value of 0.0 indicates the volume rounds to less than 0.1 million cubic or board feet. Columns and rows may not add to their totals due to rounding.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties
 ChChDeFol.iMaMcMoPl = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Platt counties
 CoDoEd = Coles, Douglas, and Edgar counties
 CoDuLaWi = Cook, DuPage, Lake, and Will counties
 GrKeLa = Grundy, Kendall, and La Salle counties

Table IL-65.—Sampling errors, in percent, for area, volume, average annual net growth, average annual removals, and average annual mortality on timberland by inventory unit and county, Illinois, 2005

Inventory unit and county	Forest area	Timberland area	Growing stock				Sawtimber			
			Volume	Average annual		Average annual mortality	Volume	Average annual		Average annual mortality
				net growth	removals			net growth	removals	
Southern										
Alexander	30.90	30.90	35.26	90.98	--	89.30	39.76	100.00	--	93.07
Franklin	31.97	31.97	38.29	91.69	--	100.00	42.09	95.35	--	--
Gallatin	35.65	35.65	42.05	65.56	--	96.73	44.89	65.13	--	--
Hamilton	29.16	29.16	33.66	63.01	--	81.50	36.16	63.97	--	100.00
Hardin	29.38	29.38	33.36	100.00	--	100.00	34.33	100.00	--	100.00
Jackson	21.50	21.50	26.13	49.50	100.00	100.00	27.57	52.34	100.00	100.00
Johnson	23.12	24.08	27.87	100.00	--	91.58	29.92	100.00	--	100.00
Massac	37.21	37.21	45.51	100.00	100.00	100.00	45.99	100.00	--	100.00
Perry	31.57	31.57	39.07	100.00	100.00	100.00	40.49	100.00	--	100.00
Pope	16.21	16.67	19.39	56.48	--	59.53	20.33	61.62	--	72.57
Pulaski	32.10	32.10	35.91	52.40	100.00	69.40	41.90	65.21	100.00	80.47
Randolph	21.56	21.56	32.70	69.10	100.00	75.63	35.12	68.96	--	84.60
Saline	31.54	32.46	36.60	70.63	--	83.43	38.61	71.27	--	--
Union	21.80	23.63	29.52	74.67	82.44	60.67	31.19	72.00	83.31	85.60
White	31.10	31.10	32.34	62.88	100.00	100.00	34.08	66.03	100.00	100.00
Williamson	24.62	26.01	32.13	56.33	--	70.38	34.30	53.29	--	94.92
Total	3.06	3.30	5.22	19.14	68.66	23.69	6.02	20.62	73.48	31.61

(Table 65 continued on next page)

(Table 65 continued on next page)

(Table 65 continued)

Inventory unit and county			Growing stock				Sawtimber			
			Volume	Average annual net growth	Average annual removals	Average annual mortality	Volume	Average annual net growth	Average annual removals	Average annual mortality
Claypan										
Bond	33.79	33.79	36.82	100.00	--	70.46	38.15	100.00	--	75.64
Calhoun	27.91	27.91	37.57	100.00	--	--	37.91	100.00	--	--
Clark	26.43	26.43	31.67	100.00	100.00	75.12	32.12	65.39	100.00	100.00
Clay	35.67	35.67	47.51	100.00	--	80.76	51.04	100.00	--	86.16
Clinton	50.96	50.96	58.19	100.00	--	100.00	58.62	100.00	--	100.00
Washington	34.53	34.53	44.85	100.00	100.00	77.38	47.90	100.00	100.00	81.60
Crawford	29.68	29.68	33.48	100.00	--	100.00	34.71	100.00	--	100.00
Cumberland	82.37	82.37	84.45	100.00	--	--	87.03	100.00	--	--
Jasper	41.79	41.79	60.27	100.00	100.00	100.00	65.69	100.00	--	100.00
Edwards	44.99	44.99	56.54	96.85	100.00	88.76	54.61	100.00	100.00	--
Wabash	98.43	98.43	98.43	100.00	--	100.00	98.43	100.00	--	100.00
Effingham	30.89	30.89	37.31	100.00	81.55	66.39	40.88	100.00	80.95	--
Fayette	22.30	22.30	27.19	54.27	100.00	68.09	29.81	56.83	100.00	100.00
Greene	38.27	38.27	47.92	68.89	100.00	98.90	46.86	75.97	100.00	100.00
Jefferson	24.39	24.39	44.52	81.68	100.00	59.22	48.29	99.07	100.00	64.57
Jersey	29.89	33.62	39.07	82.32	--	100.00	39.85	78.56	--	100.00
Lawrence	40.04	43.01	60.85	83.64	--	100.00	63.90	100.00	--	100.00
Macoupin	22.84	22.84	24.91	54.02	100.00	100.00	25.76	55.60	--	100.00
Madison	26.84	26.84	35.46	42.50	100.00	58.83	36.65	43.74	100.00	71.57
Marion	23.91	23.91	32.29	45.44	--	59.12	34.14	51.46	--	100.00
Monroe	35.23	35.23	39.92	100.00	--	100.00	41.28	100.00	--	100.00
Montgomery	29.99	29.99	38.83	75.19	--	75.46	39.66	62.42	--	85.08
Richland	43.13	43.13	51.77	99.56	--	100.00	65.57	97.70	--	100.00
St. Clair	28.04	28.04	39.71	100.00	100.00	100.00	39.50	100.00	100.00	100.00
Shelby	31.59	31.59	42.40	100.00	100.00	100.00	43.19	97.11	--	100.00
Wayne	27.18	28.20	34.14	100.00	78.62	60.49	36.37	100.00	76.97	61.01
Total	3.46	3.53	6.17	28.44	41.95	24.35	6.76	27.17	42.01	27.48

(Table 65 continued on next page)

(Table 65 continued)

Inventory unit and county	Forest area	Timberland area	Growing stock				Sawtimber			
			Volume	Average annual net growth	Average annual removals	Average annual mortality	Volume	Average annual net growth	Average annual removals	Average annual mortality
Prairie										
Adams	24.62	24.62	30.55	79.53	100.00	76.99	33.37	85.27	100.00	98.90
BoDeKaMc	24.36	25.60	30.92	85.54	100.00	89.29	31.22	81.57	100.00	100.00
Brown	28.19	28.19	32.69	57.05	--	100.00	35.55	64.39	--	--
Bureau	32.08	32.08	65.45	94.28	--	68.75	71.46	98.20	--	84.21
Carroll-Stephenson	26.39	27.57	31.97	100.00	--	100.00	34.53	100.00	--	100.00
Cass	35.87	35.87	40.18	72.13	--	100.00	41.15	73.66	--	--
ChChDeFoLiMaMcMoPi	20.95	22.80	33.29	89.65	--	100.00	34.54	100.00	--	100.00
CoDoEd	29.10	29.10	36.77	95.43	--	75.62	38.28	95.08	--	--
CoDuLaWi	17.98	23.44	30.97	56.08	--	100.00	32.44	59.54	--	100.00
Fulton	20.63	20.63	27.38	55.98	--	78.10	28.64	58.75	--	91.59
GrKeLa	28.87	30.20	37.67	53.09	96.77	90.51	38.60	50.27	96.03	100.00
Hancock	29.68	29.68	50.08	97.33	100.00	100.00	52.64	100.00	100.00	--
Henderson	34.88	34.88	51.34	71.81	100.00	100.00	57.37	71.93	--	100.00
Henry-Stark	37.02	37.02	54.60	100.00	90.77	100.00	55.44	100.00	100.00	100.00
Iroquois-Kankakee	35.18	35.18	42.70	100.00	--	72.40	44.26	100.00	--	--
Jo Daviess	26.97	26.97	33.95	71.95	100.00	64.62	35.94	84.14	100.00	67.88
Knox-Warren	24.27	24.27	34.95	100.00	--	81.49	36.84	100.00	--	81.92
Lee-Whiteside	37.86	37.86	52.96	93.61	85.36	100.00	55.63	95.77	88.41	100.00
Logan-Tazewell	36.62	36.62	46.65	66.45	--	100.00	59.16	67.39	--	--
Marshall-Putnam	33.92	33.92	45.91	100.00	100.00	88.52	46.80	100.00	100.00	100.00
Mason-Menard	36.18	36.18	48.32	79.70	100.00	65.81	53.57	78.95	100.00	100.00
McDonough	38.18	38.18	49.32	100.00	--	100.00	58.72	100.00	--	100.00
Mercer	35.80	35.80	48.15	100.00	--	82.99	46.14	91.67	--	100.00
Morgan-Scott	30.08	30.08	39.82	82.47	--	96.47	42.53	94.96	--	100.00
Ogle	33.78	33.78	43.39	99.24	--	100.00	44.66	98.12	--	--
Peoria	28.46	29.67	33.22	100.00	--	94.79	34.95	100.00	--	99.22
Pike	19.50	19.50	22.17	75.09	100.00	70.22	23.06	81.52	100.00	100.00
Rock Island	30.77	30.77	39.91	100.00	--	64.97	42.10	100.00	--	71.37
Sangamon	35.22	35.22	37.28	85.03	--	100.00	37.11	88.34	--	--
Schuyler	21.75	21.75	28.79	63.96	76.09	93.59	30.39	91.10	75.11	100.00
Vermilion	35.18	35.18	50.00	72.74	--	100.00	53.24	70.52	--	--
Winnebago	49.45	49.45	54.93	83.69	--	100.00	56.67	100.00	--	100.00
Woodford	38.48	38.48	43.94	84.50	--	92.18	45.64	83.25	--	--
Total		3.03	3.26	19.19	39.85	21.05	5.68	20.62	42.45	26.27
All counties		1.87	1.98	12.26	26.49	13.22	3.56	12.75	27.70	16.14

Sampling errors that exceed 100% are reported as 100%.

BoDeKaMc = Boone, DeKalb, Kane, and McHenry counties

ChChDeFoLiMaMcMoPi = Champaign, Christian, De Witt, Ford, Livingston, Macon, McLean, Moultrie, and Piatt counties

CoDoEd = Coles, Douglas, and Edgar counties

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Crocker, Susan J.; Barnett, Charles J.; Hatfield, Mark A. 2013. **Illinois' Forests, 2005: Statistics, Methods, and Quality Assurance**. Resour. Bull. NRS-30. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 94 p.

The first full annual inventory of Illinois' forests was completed in 2005. This report contains 1) descriptive information on methods, statistics, and quality assurance of data collection, 2) a glossary of terms, 3) tables that summarize quality assurance, and 4) a core set of tabular estimates for a variety of forest resources. A detailed analysis of inventory data is presented in a separate publication (Crocker et al. 2009).

KEY WORDS: inventory, forest statistics, Illinois

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