

**Forest Service Handbook
National Headquarters (WO)
Washington, DC**

Forest Service Handbook 2409.14 – Timber Management Information System Handbook

Chapter 70 - Glossary

Amendment: 2409.14-1994-8

Effective date: August 12, 1994

Duration: This amendment is effective until superseded or removed.

Approved by: Jack Ward Thomas, Chief

Date approved:

Responsible Staff:

Last Change: Amendment 2409.14-94-7 to FSH 2409.14,60.

Superseded Document(s): Amendment 2409.14-92-1, Amendment 2409.14-92-12, Amendment 2409.14-92-13, and Amendment 2409.14-92-14 to 2409.14, 70.

Digest: Following is an explanation of the changes throughout the directive by section.

70.6: Adds the Sales Tracking and Reporting System (STARS) User Guide and the Timber Activity Control System (TRACS) User Guide and Data Dictionary to list of references.

71 - 78: Removes terms and definitions that are now published in FSH 6609.15, Standards for Data and Data Structures Handbook; STARS User Guide; TRACS User Guide; and TRACS Data Dictionary and User Guide.

Table of Contents

70.6 - References	3
71 - Vegetation	3
71.1 - Vegetation Features	3
71.2 - Vegetation Attributes.....	3
72 - Data Attributes	4
73 - Topographic Attributes	10
74 - Jurisdiction and Geographic Attributes.....	10
75 - Survey Attributes	12
76 - Ecological Attributes	12
77 - Soil Attributes.....	12
78 - Timber Management Attributes.....	13

70.6 - References

American Congress on Surveying and Mapping - American Society of Civil Engineers, 1972. Definitions of surveying and associated terms. American Congress on Surveying and Mapping - American Society of Civil Engineers, Washington, DC. 205 pp.

Eyre, F. H. 1980. Forest cover types of the United States and Canada. Society of American Foresters, 5400 Grosvenor Lane, Washington, DC. 20014. 148 pp.

Thomas, Jack Ward. 1979. Wildlife habitats in managed forests. Agriculture Handbook 553. U.S. Department of Agriculture, Washington, DC. 512 pp.

U.S. Department of Agriculture, Forest Service, Timber Management - Washington Office 1989. Interim Resource Inventory Glossary. Washington, DC. 96 pp.

U.S. Department of Agriculture, Forest Service, Timber Management - Washington Office. 1992. Sales Tracking and Reporting System (STARS) User Guide. Fort Collins, CO. 111 pp.

U.S. Department of Agriculture, Forest Service, Timber Management - Washington Office. 1993. Timber Activity Control System (TRACS) User Guide. Fort Collins, CO.

U.S. Department of Agriculture, Forest Service, Timber Management - Washington Office. 1988. Timber Activity Control System (TRACS) Data Dictionary. Fort Collins, CO. 51pp.

U.S. Department of Commerce, Census Bureau, 1985. Congressional district atlas. Washington, DC.

71 - Vegetation

Describe vegetation, including trees, in terms of vegetation features and attributes.

71.1 - Vegetation Features

Vegetation features are defined as plant and stands in FSH 6609.15, sec. 21.11.

71.2 - Vegetation Attributes

Vegetation attributes are defined in FSH 6609.15, sec. 21.12.

72 - Data Attributes

The following terms define attributes of the timber management data and/or how the data was collected:

Crown Method. The method used to determine crown ratio.

1. Valid Values. 20 characters, alpha.

<u>Value</u>	<u>Meaning</u>
Compacted	Lower branches are visually used to fill in holes in the canopy.
Uncompacted	The crown ratio is calculated by dividing the length of crown by the height of the tree.

2. Units. Not applicable.
3. Example. The crown method used visual filling in the crown using the lower branches (compacted).
4. Source for Data Standard. Interim Resource Inventory Glossary.

Cruise Method. The sampling method used to estimate tree populations.

1. Valid Values. 6 characters, alpha/numeric.

<u>Value</u>	<u>Meaning</u>
100	100% measurement of all trees
3P	3P sample
FIX	Fixed plot sample
F3P	Fixed plot sample with 3P subsample
PNT	Point sample (variable plot)
P3P	Point sample with 3P subsample
STR	Sample tree sample
S3P	Sample tree sample with 3P subsample
PCMPLT	Point sample with trees either all measured or all counted on an individual point
PCMTRE	Point sample with some trees measured and some trees counted on each point

2. Units. Not applicable.
3. Example. The stand was cruised with point samples (PNT).

4. Source for Data Standard. Timber Management Staff, Washington Office.

Data Source. Data source describes the administrative unit and nature of the study supplying the data.

1. Valid Values. 1 character, numeric.

<u>Value</u>	<u>Meaning</u>
1	NFS fell, buck, and scale sample
2	NFS inventory net volume studies
3	Forest Survey
4	NFS volume estimator special study
5	Industry
6	University
7	Cooperatives
8	Research Station study

2. Units. Not applicable.

3. Example. This is a Forest Survey study (3).

4. Source for Data Standard. Timber Management Staff, Washington Office.

Diameter Measurement Technique. The technique used to measure the diameters of a tree or log and the relative precision of the measurement.

1. Valid Values. 1 character, numeric.

<u>Value</u>	<u>Meaning</u>
1	Cross section cut--diameter measured with scale stick or tape
2	Diameter tape on outside bole
3	Dendrometer
4	Telerelaskop
5	Caliper
6	Ocular estimate
7	Laser device

2. Units. Not applicable.

3. Example. Diameters were measured with a laser device (7).

4. Source for Data Standard. Timber Management Staff, Washington Office.

Ecological Type Reference. A reference to the published ecological classification system used for ecological type.

1. Valid Values. 2 characters, numeric.

<u>Value</u>	<u>Meaning</u>
01	Pfister and others, GTR Int-34 (1977)
02	Steele and others, GTR Int-114 (1981)
03	Region 6 Ecoclass
04	Region 3 Habitat Types (Plant Association)
05	Girard and others, RP RM-281
06	Komarkova and others, GTR RM-163
07	Alexander, GTR RM-162

2. Units. Not applicable.
3. Example. The ecological reference is Pfister (01).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Measurement System. An alpha code to indicate whether the measurement is in English or metric.

1. Valid Values. 1 character, alpha.

<u>Value</u>	<u>Meaning</u>
E	English
M	Metric

2. Units. Not applicable.
3. Example. Measurements are in English Units (E).
4. Source for Data Standard.

Note Text. The notes relating to the observations being made.

1. Valid Values. 1200 characters, alpha/numeric.
2. Units. Not applicable.

3. Example. Note: We were north of the intersection of Hwy 285 and County Road 3. The stand has high mortality. It was raining and instruments were hard to read.

4. Source for Data Standard. Timber Management Staff, Washington Office.

Number Sections Cuts. This is a count of the number of places where observations are recorded exclusive of the butt measurement. It is used as an edit check for felled tree or dendrometer studies to ensure that all the section measurements have been recorded.

1. Valid Values. 3 characters, numeric.

2. Units. Each cut.

3. Example. The tree has 14 section cuts (14).

4. Source for Data Standard. Timber Management Staff, Washington Office.

Random Number Location. A random number assigned to the sample location. It is used in selecting subsets of the data for analysis.

1. Valid Values. 12 characters, numeric.

2. Units. Not applicable.

3. Example. The random number of this location is 60789321.

4. Source for Data Standard. Timber Management Staff, Washington Office.

Random Number Tree. A random number assigned to the tree. It is used in selecting subsets of the collected data for analysis.

1. Valid Values. 12 characters, numeric.

2. Units. Not applicable.

3. Example. The random number of this tree is 17153.

4. Source for Data Standard. Timber Management Staff, Washington Office.

Record Number. A record counter that helps to identify individual records in specific computerized files.

1. Valid Values. 10 characters, numeric.

2. Units. Not applicable.
3. Example. The record number of this data element is 121387.
4. Source for Data Standard. Timber Management Staff, Washington Office.

Sample Point Number. A number which identifies sample points (plots) for a given location or stand. Also known as plot number.

1. Valid Values. 4 characters, numeric.
2. Units. Not applicable.
3. Example. The number of this sample point is (11).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Sample Size. The number of units in a population that have been or are to be sampled for a designated attribute. This is usually noted as "n" in statistical formulas.

1. Valid Values. 12 characters, numeric.
2. Units. Each.
3. Example. The number of sample trees is 175 (175).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Scaler ID. An identification code assigned to an individual scaler.

1. Valid Values. 20 characters, alpha/numeric.
2. Units. Not applicable.
3. Example. This load was scaled by scaler (R1-F03-D04-101).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Segment ID. A unique alpha-numeric identifier for each segment of a tree that is included in a fork which is not classed as the main stem.

1. Valid Values. 10 characters, alpha/numeric.
2. Units. Not applicable.

3. Example. The segment ID for the second segment in the larger fork is F2 (F2).
4. Source for Data Standard.

Segment Number. A unique numerical identifier for each segment of a tree or log.

1. Valid Values. 4 characters, numeric.
2. Units. Not applicable.
3. Example. If a tree was segmented into five pieces, the bottom segment might be numbered 1, the second from the bottom numbered 2, and so forth.
4. Source for Data Standard. Timber Management Staff, Washington Office.

Site Index Reference. The index name and base age used when assigning a site index.

1. Valid Values. 25 characters, alpha/numeric.
2. Units. Not applicable.
3. Example. Site index is Minor's base age 50 (Minor, Base 50).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Site Index Species. The tree species upon which the site index reference is based. See also plant species.

1. Valid Values. 6 characters, alpha/numeric.
2. Units. Not applicable.
3. Example. The site index species is ponderosa pine (PIPO).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Stratum ID. An identification for an area or group of trees that are to be sampled as a population.

1. Valid Values. 25 characters, alpha/numeric.
2. Units. Not applicable.
3. Example. This stratum is (pine sawtimber 07).

4. Source for Data Standard. Timber Management Staff, Washington Office.
Survey Cycle. The period between measurements, usually in number of years.

1. Valid Values. 2 characters, numeric.
2. Units. Not applicable.
3. Example. The survey cycle is 10 years (10).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Tree Number. A unique identifier for a tree in a sample, or at a sample point or within a sample plot.

1. Valid Values. 5 characters, numeric.
2. Units. Not applicable.
3. Example. The tree number is 147 (147).
4. Source for Data Standard. Timber Management Staff, Washington Office.

73 - Topographic Attributes

See FSH 6609.15, 21.14a, for definitions of topographic attributes.

74 - Jurisdiction and Geographic Attributes

See FSH 6609.15, 21.32b, for ownership, jurisdiction, or geographic attributes not defined here.

UTM Zone. A reference for a geographic location grid on U.S. Geographical Survey (USGS) topographic maps. Universal Transverse Mercator (UTM).

1. Valid Values. 2 characters, numeric.
2. Units. Not applicable.
3. Example. The UTM Zone is 21 (21).
4. Source for Data Standard. USGS quadrangle maps.

X/Y Coordinate System. The system that defines which East/West, and North/South references will be used.

1. Valid Values. 1 character, numeric.

<u>Value</u>	<u>Meaning</u>
1	UTM
2	Latitude/Longitude
3	State Plane Coordinate
4	Township, Range, Section, Meridian

2. Units. Not applicable.
3. Example. Latitude/Longitude was used (2).
4. Source for Data Standard. Timber Management Staff, Washington Office.

X Coordinate. An East/West reference.

1. Valid Values. 7 characters, numeric.
2. Units. Not applicable.
3. Example: The longitude is 101 degrees, 99 minutes, 11 seconds; (1019911).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Y Coordinate. A North/South reference.

1. Valid Values. 7 characters, numeric.
2. Units. Not applicable.
3. Example: The latitude is 102 degrees, 77 minutes, 44 seconds; (1027744).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Compartment. A compartment is a small subdivision of forest area for purposes of orientation, administration, and silvicultural operations. It is defined by permanent boundaries, either of natural features or artificially marked. Is is considered to be part of the stand number. Aliases: STARS-C0840, LOCATION in Region 2, Region 3, and Region 4.

1. Valid Values. 6 characters, numeric.
2. Units. Not applicable.

3. Example. The compartment is 101 (101).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Location ID. The name of the study/plot installation.

1. Valid Values. 20 characters, alpha/numeric.
2. Units. Not applicable.
3. Example. (Elk Mtn Growth Study).
4. Source for Data Standard. Timber Management Staff, Washington Office.

Stand Number. The number identifying an individual stand. It is comprised of 10 digits, 6 for the Compartment and 4 for the Stand. Aliases: STARS-C0845, SITE in Region 2, 3, and 4. In common usage, compartment and stand are identified separately and the leading zeros are not used.

1. Valid Values. 10 characters, numeric.
2. Units. Not applicable.
3. Example. The stand number for stand 5 in compartment 102 is (0001020005).
4. Source for Data Standard. Timber Management Staff, Washington Office.

75 - Survey Attributes

See FSH 6609.15, 21.31 for definitions of survey attributes.

76 - Ecological Attributes

See FSH 6609.15, 21.11b for definitions of ecological attributes.

77 - Soil Attributes

See FSH 6609.15, 21.15b for definitions of soil attributes.

78 - Timber Management Attributes

Use attributes necessary for timber management processes, procedures and reporting not previously defined or referenced in sections 71-77 described in information subsystems titled Sales Tracking and Reporting System (STARS) and Timber Activity Control System (TRACS), which includes TRACS-Silvicultural Accomplishment (TRACS-SILVA). See the definitions contained in the STARS and TRACS User Guides and TRACS Data Dictionary (sec. 70.6).