

## **CHIPPEWA NATIONAL FOREST FSVEG STAND LAYER METADATA**

This data set displays the vegetation on Forest Service lands within the Chippewa National Forest, by stand. A stand is the basic management unit for Forest activities. It is recognized as an area where vegetation characteristics are relatively homogeneous and distinct from adjacent stands. Stands are characterized by their existing vegetation (EV) (forest type or vegetation type if non-forested) and other attributes.

The forest is divided into districts. There are currently three legislated districts. Each district is divided into smaller administrative units called locations (or compartments). Each location is divided into stands, usually around 100. These data with their various attributes support forest management, project-level planning, decision making, and implementation and monitoring on the Chippewa National Forest.

The FSveg Stand data set is available free of charge for public and private use. The data is usually provided in an Arc/Info export format or ESRI shapefile. A charge may apply for any processing or conversion. This data set represents the most current and complete data available at the time of acquisition. The user assumes responsibility for appropriate use of the data, recognizing that misuse may yield inaccurate or misleading results. The Forest Service reserves the right to edit, update, modify, or replace GIS data without notification.

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### **FEES**

Typically none. Fees may be assessed for additional processing.

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## **PROJECTION**

Universal Transverse Mercator  
NAD\_1983\_UTM  
Zone\_15N

## **ATTRIBUTES**

**FID:** Internal feature number. Sequential unique whole numbers that are automatically generated.

**Shape:** Shape of feature.

**SETTING-ID:** Unique number identifying each stand.

**REGION\_PRO:** "09" indicates USFS Eastern Region.

**FOREST\_PRO:** "03" indicates the Chippewa National Forest.

**DISTRICT\_N:** Legislated district where an integer is used to represent the district in a two digit character field.

01=Blackduck District  
03=Deer River District  
05=Walker District

**LOCATION:** Compartment within district in which the stand resides. Defined as a 5 place character field where integers are used to represent compartments.

**POLY\_ID:** Stand number within compartment where the stand resides.

**STAND\_ACRE:** Stand acreage calculated from spatial feature.

**NUM\_EXAMS:** 0= There's no common stand exam data in FSveg.  
1= There's common stand exam data in FSveg.

**NUM\_PLOTS:** If common stand exam data is available in FSVeg, this is the number of plots in that data and upon which stand attributed are based. Gives the user a sense of confidence in attribute data.

**PROJECT\_NA:** The project name in FSVeg that is associated with the common stand exam data.

**EXAM\_DATE:** The year common stand exam data was collected  
OR; if there is no common stand exam data, the year the attributes were updated manually, without data.

**EXAM AGE:** The age of attribute data (current year minus EXAM\_DATE). This field is calculated each time the stand data is pulled using the GI tool.

**EXAM\_PURPO:** Exam purpose. The reason common stand exam data was collected.

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RE = reforestation (stocking surveys)  
SE = common stand exam

**EV\_CODE:** Existing Vegetation. FIA forest type code based on dominant species in a stand. Commonly the EV code is calculated in FSVeg using an FIA algorithm run against plot data for a stand (setting). The EV is based on species with dominate basal area. Therefore, an aspen stand may be pure aspen, but it could also be a diverse stand where aspen is dominant. It must be remembered that the "EV\_CODE" is a simple classification system and does not tell a person anything about within stand diversity. A clue to within stand diversity can be gained by referencing the "POLE\_DOM\_S" item, which is the dominate species in the pole class, and; "SAW\_DOM\_SP" which is the dominant species within the saw timber class. To gain a full appreciation for within stand diversity one should obtain a live tree stocking report from FSVeg, for the setting in question. This report provides a complete profile of species and size classes within the stand.

<b>EV_CODE</b>	<b>Description</b>
101	Jack pine
102	Red pine
103	Eastern white pine
121	Balsam fir
122	White spruce
125	Black spruce
126	Tamarack
127	Northern white-cedar
401	White pine / red oak / white ash
409	Other pine / hardwood
503	White oak / red oak / hickory
505	Northern red oak

509	Bur oak
517	Elm-ash-locust
519	Red maple / oak
520	Mixed upland hardwoods
701	Black ash / American elm / red maple
704	Willow
706	Sugarberry / hackberry / elm / green ash
708	Red maple / lowland
801	Sugar maple / beech / yellow birch
805	Hard maple / basswood
809	Red maple / upland
901	Aspen
902	Paper birch
904	Balsam poplar
999	Non stocked

**EV\_NAME:** The description of the EV\_CODE. See above.

**VEGETATION:** A two digit vegetation code is used when the EV\_CODE is "999". This integer describes the vegetative condition. Wetland types follow the classification scheme for freshwater wetlands published in USFWS Circular 39, (Shaw and Fredine, 1956).

50	Undifferentiated Upland Opening
51	Upland Opening, Grass
52	Upland Opening, Forb
53	Upland Opening, Shrub
60	Undifferentiated Wetland
62	Sedge Meadow (Type 2)
63	Shallow Marsh (Type 3)
64	Deep Marsh (Type 4)
65	Open Water < 10 acres (Type 5)
66	Shrub Swamp (Type 6)
68	Bog (Type 8)
70	Water; Lakes > 10 acres
80	Water, Stream, or River
90	Road
95	Gravel Pit

**YEAR\_OF\_OR:** The year the stand was established. The year the 'featured stand' was established. If multi-aged, the year of origin is based on the oldest trees in a stand, where those oldest trees have a basal area of at least 50 ft<sup>2</sup>/acre. If the basal area of the overstory trees is less than 50 ft<sup>2</sup>/acre, the year of origin is based on intermediates or understory.

In the case following a harvest, if the retained trees have less than 50 ft<sup>2</sup>/acre of basal area density following harvest, the regeneration becomes the featured stand and the age it re-set. If,

the residual trees basal area density is equal to or greater than 50 ft<sup>2</sup>/acre the year of origin of the older trees is retained as the stand's year of origin.

**STAND\_AGE:** The age of the stand. Calculated field. Current year minus YEAR\_OF\_OR.

**SITE\_INDEX:** Relative productivity of a stand. Site index is the height of a "free to grow" tree, of a given species, at a base age on the site. A minimum of three trees of the same species are sampled to calculate site index. References used follow:

Balsam Fir- Carmean, Willard H.; Hahn, Jerold T. 1981. Revised site index curves for balsam fir and white spruce in the Lake States. Res. Note NC-269. St. Paul, MN: U.S. Department of Agriculture, Forest Service, Lake States Forest Experiment Station. 4 p.

Red Maple- Carmean, W.H., Hahn, J.T. and Jacobs, R. D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142p. 1989, p. 16.

Sugar Maple- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142p. 1989, p. 18.

Yellow Birch- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p.1989, p. 21.

Paper Birch- Carmean, W.H., Hahn, J.T.,and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142p. 1989, p24.

Black Ash- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142p. 1989, p. 29.

Green Ash- Carmean, W.H., Hahn, J.T. and R.D. Jacobs. 1989. Site index curves for forest tree species in the eastern United States. Gen Tech. Rep. NC-128. St. Paul, MN: U.S. Dept. of Agric., For. Serv., North Central Forest Experiment Station. P. 30, (Broadfoot 1969)

Eastern Larch- Carmean, W.H., Hahn, J.T. and R.D. Jacobs. 1989. Site index curves for forest tree species in the eastern United States. Gen Tech. Rep. NC-128. St. Paul, MN: U.S. Dept. of Agric., For. Serv., North Central Forest Experiment Station. P. 31 (Kellogg 1939)

Jack Pine- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. p. 89.

White Spruce- Carmean, Willard H.; Hahn, Jerold T. 1981. Revised site index curves for balsam fir and white spruce in the Lake States. Res. Note NC-269. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 4 p.

Black Spruce- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 85.

Red Pine- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 110.

White Pine- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 118.

Balsam Poplar- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 47.

Eastern Cottonwood- Carmean, W.H., Hahn, J.T. and R.D. Jacobs. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 43.

Bigtooth Aspen- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 47.

Trembling Aspen- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 47.

Black Cherry- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 49.

White Oak- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 56.

Bur Oak- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 64.

Northern Red Oak- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p.1989, p. 63.

Northern White Cedar- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p.1989, p. 141.

American Basswood- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p. 1989, p. 66.

American Elm- Carmean, W.H., Hahn, J.T., and Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN. 142 p.1989, p. 68.

**SITE\_SPECIES:** Species code representing the tree species used to calculate site index for a stand.

TIAM	American Basswood
FRNI	Black Ash
FRPE	Green Ash
POGR4	Bigtooth Aspen
POTR5	Trembling Aspen
BEPA	Paper Birch
PRSE2	Black Cherry
PODE3	Eastern Cottonwood
ULAM	American Elm
ABBA	Balsam Fir
ACRU	Red Maple
ACSA3	Sugar Maple
THOC2	Northern White Cedar
QUMA2	Bur Oak
QURU	Northern Red Oak
PIBA2	Jack Pine
PIRE	Red Pine
PIST	Eastern White Pine
POBA2	Balsam Poplar
PIMA	Black Spruce
PIGL	White Spruce
LALA	Eastern Larch
QUAL	White Oak
BEAL2	Yellow Birch

**BA\_GT1:** Total mean basal area density for a stand calculated from trees with a diameter at breast height (DBH) of 1” or greater.

**DBH\_QMD\_GT:** This is an average diameter breast height for the stand, using the quadratic mean diameter of trees with a DBH of 1" or greater.

**POLE\_BA:** Mean basal area density for pole trees in a stand. Pole trees have a DBH from 5.0" to 8.99".

**POLE\_DBH:** Mean DBH of trees in a stand from 5" to 8.99" DBH.

**POLE\_DOM\_S:** The dominate species in the pole class.

**SAW\_BA:** Mean basal area density for saw timber in a stand. Saw timber has a DBH greater than or equal to 9".

**SAW\_DBH:** Mean DBH of trees in a stand  $\geq 9$ " DBH.

**SAW\_DOM\_SP:** The dominate species in the saw timber class.

**MERCH\_BA:** Pole timber and saw timber basal area densities added together.

**MERCH\_DBH:** Mean DBH of all tree 5"+ DBH.

**MERCH\_DOM\_:** The dominate species in the merchantable size classes (5"+ DBH).

Damage Codes:

Stand damage is recorded, for the three tops forms of damage, in the fields **CAT1, AGT1, SEV1**  
**CAT2, AGT2, CAT2, CAT3, AGT3, and SEV3.**

**CAT** means 'category'

**AGT** means 'agent'

**SEV** means 'severity'

Code descriptions for Categories, Agents and Severity can be found in [APPENDIX K: DAMAGE CATEGORIES, AGENTS, SEVERITY RATINGS, & TREE PARTS](http://fsweb.nrm.fs.fed.us/applications/fsveg/appendices.shtml) of the FSVeg User's Guide, found at <http://fsweb.nrm.fs.fed.us/applications/fsveg/appendices.shtml>

**REMARKS:** These are remarks entered by field or district staff.