Creators: Alexandra Kosiba and James Duncan, Forest Ecosystem Monitoring Cooperative, https://www.uvm.edu/femc

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The Dendroecological Database, founded in 2017, is a collaborative effort among the <u>U.S.D.A.</u> <u>Forest Service Northern Research Station</u>, the University of Vermont (<u>College of Arts and</u> <u>Sciences</u> and the <u>Rubenstein School of the Environment and Natural Resources</u>) and the <u>Forest</u> <u>Ecosystem Monitoring Cooperative</u>. The goal of the database is to provide a central archive for data derived from dendroecological studies, including tree-ring-based chronologies and their associated forest ecology data. At present, there is no such database in existence and many dendroecological collections are not readily available to the greater research community for comparative and larger-scale analyses.

# PlotID

Text: Alphanumeric text string to uniquely identify the plot within the project. *DateCollected* 

Text: Date when tree cores were collected (YYYY-MM-DD).

Crew

Text: List of names/initials of people who collected the samples. *Latitude* 

#### Units

Text: Units of the diameter measurement, typically inches or centimeters. *CrownPosition* 

Text: Visual assessment of the position of the tree's crown: dominant, codominant, intermediate, or suppressed.

Dominant	Crown extends above the main canopy; receives full light from above and partial light from the sides.
Codominant	Crown forms the main canopy; receives full light from above and relatively little light from the sides.
Intermediate	Crown lower than or just entering the main canopy; receives little direct light from above and none from the sides.
Suppressed	Crown is fully below the main canopy; receives no direct light from above or sides.

*Source: Vermont North American Maple Project. 2006. Manual. Available at: <u>http://www.esf.edu/for/yanai/research\_class/06VTNAMPmanual.pdf</u>* 

#### Vigor

Integer: Visual assessment of the vigor class of the tree's crown from 1-5.

- 1 Healthy, no major branch mortality; less than 10% branch or twig/foliage mortality or foliage discoloration.
- 2 Light decline; branch mortality, twig dieback, or foliage discoloration present in 10-25% of the crown.
- 3 Moderate decline; branch mortality, twig dieback, or foliage discoloration present in 26-50% of the crown.
- 4 Severe decline; branch mortality, twig dieback, or foliage discoloration present in more than 50% of the crown.
- 5 Dead

*Source: Vermont North American Maple Project. 2006. Manual. Available at: <u>http://www.esf.edu/for/yanai/research\_class/06VTNAMPmanual.pdf</u>* 

### Dieback

Integer: Visual assessment of the proportion of the tree's crown with dieback. Dieback begins at branch terminal and progresses in- and downward. To be considered dieback, the branch must be 1" diameter at the point of attachment to another branch or bole. Branch mortality at the base of the crown and large, dead branches without fine branches present are excluded from the assessment. Crown dieback are rated in 5% classes following the table below.

Class Range

PlotID

Text: Alphanumeric text string to uniquely identify the plot within the project.

TreeID

Text: Alphanumeric text string to uniquely identify the tree within the plot.

Species

Text: Species code as recorded in the data. This should match to a definition in the taxonomic standard defined for the project, such as the USDA Plants Database.

DBH

Decimal: Diameter at breast height, typically 4.5 ft/1.37 m above ground. DBH\_Units

Decimal: Units of the diameter measurement, typically inches, millimeters, or centimeters.

# Increment\_Units

Text: Units of the annual increment measurement, typically inches, millimeters, or centimeters.

CoreID

Text: Alphanumeric text string to uniquely identify the core within the plot. Typically,

Text: Lead researcher of the project and/or resulting manuscript; or Principal Investigator.