

Metadata

Dataset Title:

Cary_Forest_Plots_2006_Additional_Data.csv

Cary Institute of Ecosystem Studies, Cary Forest Plot Data, Additional Data from 2006

Abstract

This dataset is a contribution to the Cary Institute of Ecosystem Studies. The Cary Forest Plots were established in 1984 as part of The Cary Vegetation Study, which described the vegetation of the then Cary Arboretum. The project established 76 permanent plots referred to as the "Cary Forest Plots". Data collection in the plots was extensive and included a survey of mature trees, saplings, seedlings, shrubs and herbaceous species as well as soil analyses, tree ring data and physical descriptions of each plot. Subsequent re-surveys of the plots were done in 20 of the 76 original plots as part of the Forest Response to Stress and Damage (FORSTAD) project, which took place over approximately 10 years in the 1990's. These surveys included an annual canopy census of trees. Canopy census data were also collected in other plots studied in the FORSTAD project, including Nutrient Cycling Plots A & B and in the control plots in the Yellow, Teahouse grid and the Red, Henry Grid. Another resurvey of 43 of the Cary Forest Plots was done in 2006 by Dan Katz as part of his Research Experience for Undergraduates (REU) project and his senior thesis project at Bard College. His surveys included mature trees, saplings, seedlings, shrubs and herbaceous species as well as soil analyses. This repository includes Cary Forest Plot data from Dan Katz's 2006 project.

Publications:

GLITZENSTEIN, J. S., C. D. CANHAM, M. J. MCDONNELL, AND D. R. STRENG. 1990. Effects of environment and land-use history on upland forests of the Cary Arboretum, Hudson Valley, New York. *Bull. Torrey Bot. Club* 117: 106–122.

Katz, D.S.W., Lovett, G.M., Canham, C.D., & O'Reilly, C.M. 2010. Legacies of land use history diminish over 22 years in a forest in southeastern New York. *Journal of the Torrey Botanical Society* 137: 236–251.

Data provided in this dataset include tree seedling, sapling, shrub and herbaceous species data as well as soil data collected in 2006 in 43 of the Cary Forest Plots.

The Cary Institute of Ecosystem Studies furnishes data under the following conditions: The data have received quality assurance scrutiny, and, although we are confident of the accuracy of these data, Cary Institute will not be held liable for errors in these data. Data are subject to change resulting from updates in data screening or models used. Data citation: Please click on the Cite button on the Figshare repository.

Those wishing to publish data from Cary Institute of Ecosystem Studies, Cary Forest Plots are encouraged to contact the data manager at datamanagement@caryinstitute.org.

Investigators

First Name	Middle Initial	Last Name	Organization	e-mail address	ORCID ID
Daniel		Katz	Cornell University	dankatz@cornell.edu	0000-0001-5269-3599
Gary	M	Lovett	Cary Institute of Ecosystem Studies	lovettg@caryinstitute.org	0000-0002-8411-8027
Charles	D	Canham	Cary Institute of Ecosystem Studies	canhamc@caryinstitute.org	0000-0001-8361-9148

Keywords

Cary Institute, Cary Institute of Ecosystem Studies, data, hardwood forest, tree inventory, land-use history, vegetation survey

Timeframe

2006

Geographic location

The Cary Institute of Ecosystem Studies is located in Millbrook, NY USA.

Methods

See Katz, D.S.W., Lovett, G.M., Canham, C.D., & O'Reilly, C.M. 2010. Legacies of land use history diminish over 22 years in a forest in southeastern New York. *Journal of the Torrey Botanical Society* 137: 236–251.

Data Table

Column name	Description	Unit or code explanation or date format	Empty value code
Plot_Number	Plot number, associated with grid square number within which plot was located		blank
pH_2006	pH of soil in 2006	pH units	blank
Ca_mgperL_2006	Soil concentration of Calcium in 2006	mg per Liter	blank
Mg_mgperL_2006	Soil concentration of Magnesium in 2006	mg per Liter	blank
Al_mgperL_2006	Soil concentration of Aluminum in 2006	mg per Liter	blank
Mn_mgperL_2006	Soil concentration of Manganese in 2006	mg per Liter	blank
K_mgperL_2006	Soil concentration of Potassium in 2006	mg per Liter	blank
Number_Seedlings_All_2006	Number of tree seedlings of all species 2006	number	blank
Number_ACRU_Seedlings_2006	Number Acer rubrum seedlings 2006	number	blank
Number_ACSA_Seedlings_2006	Number Acer saccharum seedlings 2006	number	blank
Number_FRAM_Seedlings_2006	Number Fraxinus americana seedlings 2006	number	blank
Number_QUSP_Seedlings_2006	Number Quercus sp seedlings 2006	number	blank
Number_QUAL_Seedlings_2006	Number Quercus alba seedlings 2006	number	blank
Number_QUPR_Seedlings_2006	Number Quercus prinus seedlings 2006	number	blank
Number_URU_Seedlings_2006	Number Quercus rubra seedlings 2006	number	blank
Number_QUEV_Seedlings_2006	Number Quercus velutina seedlings 2006	number	blank
Percent_Cover_Exposed_Soil_2006	Percent cover of exposed soil 2006	percent	blank

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Percent_Cover_Exposed_Rock_2006	Percent cover of exposed rock 2006	percent	blank
Percent_Cover_Deadwood_2006	Percent cover of deadwood 2006	percent	blank
Percent_Cover_Alliaria_petiolata_2006	Percent cover of Alliaria petiolata 2006	percent	blank
Percent_Cover_Aralia_nudicaulis_2006	Percent cover of Aralia nudicaulis 2006	percent	blank
Percent_Cover_Dennstaedtia_punctilobula_2006	Percent cover of Dennstaedtia punctilobula 2006	percent	blank
Percent_Cover_Galium_sp_2006	Percent cover of Galium sp 2006	percent	blank
Percent_Cover_Hepatica_sp_2006	Percent cover of Hepatica sp 2006	percent	blank
Percent_Cover_Maianthemum_canadense_2006	Percent cover of Maianthemum canadense 2006	percent	blank
Percent_Cover_Pilea_pumila_2006	Percent cover of Pilea pumila 2006	percent	blank
Percent_Cover_Polygala_paucifolia_2006	Percent cover of Polygala paucifolia 2006	percent	blank
Percent_Cover_Potentilla_sp_2006	Percent cover of Potentilla sp 2006	percent	blank
Percent_Cover_All_Herbs_2006	Percent cover of all herb species 2006	percent	blank
Length_Shrub_Cover_cm_All_Spp_2006	Total length of shrub canopy cover that intercepted transect, all species 2006	cm	blank
Length_Shrub_Cover_cm_Berberis_thunbergii_2006	Total length of shrub canopy cover that intercepted transect, Berberis thunbergii 2006	cm	blank
Length_Shrub_Cover_cm_Euonymus_alata_2006	Total length of shrub canopy cover that intercepted transect, Euonymus alata 2006	cm	blank
Length_Shrub_Cover_cm_Lonicera_tatarica_2006	Total length of shrub canopy cover that intercepted transect, Lonicera tatarica 2006	cm	blank
Length_Shrub_Cover_cm_Rubus_sp_2006	Total length of shrub canopy cover that intercepted transect, Rubus sp 2006	cm	blank
Length_Shrub_Cover_cm_Toxicodendron_radicans_2006	Total length of shrub canopy cover that intercepted transect, Toxicodendron radicans 2006	cm	blank
Length_Shrub_Cover_cm_Viburnum_acerifolium_2006	Total length of shrub canopy cover that intercepted transect, Viburnum acerifolium 2006	cm	blank
Number_Saplings_ACSA_2006	Number of saplings Acer saccharum 2006	number	blank
Number_Saplings_ACSA_SizeClass1_2006	Number of saplings Acer saccharum in size class 1 2006	number	blank
Number_Saplings_ACRU_2006	Number of saplings Acer rubrum 2006	number	blank
Number_Saplings_ACRU_SizeClass1_2006	Number of saplings Acer rubrum in size class 1 2006	number	blank
Number_Saplings_All_Species_2006	Number of saplings of all species 2006	number	blank
Number_Saplings_BELE_2006	Number of saplings Betula lenta 2006	number	blank
Number_Saplings_CASP_2006	Number of saplings Carya sp 2006	number	blank
Number_Saplings_FRAM_2006	Number of saplings Fraxinus americana 2006	number	blank
Number_Saplings_PIST_2006	Number of saplings Pinus strobus 2006	number	blank
Number_Saplings_QUAL_2006	Number of saplings Quercus alba 2006	number	blank

Number_Saplings_QUPR_2006	Number of saplings Quercus prinus 2006	number	blank
Number_Saplings_QURU_2006	Number of saplings Quercus rubra 2006	number	blank
Number_Saplings_QUVE_2006	Number of saplings Quercus velutina 2006	number	blank
Number_Saplings_TSCA_2006	Number of saplings Tsuga canadensis 2006	number	blank
Number_Saplings_Big_ACRU_2006	Number of big saplings Acer rubrum 2006	number	blank
Number_Standing_Dead_ACRU_2006	Number of standing dead Acer rubrum 2006	number	blank
Number_Saplings_Big_ACSA_2006	Number of big saplings Acer saccharum 2006	number	blank

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