TITLE

Forest Response to Stress and Damage (FORSTAD) Foliar Data 1994-2003

PRINCIPAL INVESTIGATORS

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BEGIN DATE

1994

END DATE

2003

LOCATION

In the Cannoo Hills on the property of the Institute of Ecosystem Studies, on the Cary Arboretum, in Millbrook, New York. (41° 47′N, 73° 44′W)

LOCATION DESCRIPTION

Nutrient cycling sites are circular plots, 25.24 meters is diameter (area = 1/20 hectare). Site A is in a sheltered location on Cannoo (Tea House) Hill, elevation 180 meters, and Site B is on the western slope of North Cannoo Hill, elevation 200 meters. The canopy trees on each site are a mix of oak, maple, and pine. Nutrient cycling sites were established in 1992.

ACCESS

Public

DATA LOCATION

Institute of Ecosystem Studies, Millbrook, New York

LAST UPDATED

January, 2006

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CODES

Year = calendar year
Site = Site A or Site B
Species = QUPR (*Quercus prinus*, the chestnut oak) or
QURU (*Quercus rubra*, the Northern red oak)
nmean = mean % nitrogen
cmean = mean % carbon
cnratio = mean ratio of carbon : nitrogen

DATA DESCRIPTION

The data presented here are percentages of nitrogen and carbon, obtained using the dry combustion method. Yearly site-wide means for each species are presented.

SAMPLING DESIGN

In each year that foliar sampling in performed, trees are sampled in late July; a 12-gauge shotgun is used to shoot down twigs. On each plot, three mature *Quercus prinus* trees and three mature *Quercus rubra* trees are sampled three times each. Trees are sampled between 10:00 AM and 4:00 PM. Only south-facing mid to upper-canopy leaves are sampled, and any twig bearing acorns is discarded and the tree is re-sampled. Leaves are removed from the twigs, dried, ground and analyzed for nitrogen and carbon content.

NOTES

Carbon data is not available for the 2002 sample. Foliar samples were collected in 1992; however, this data is not included because the samples were analyzed using a different method than in 1994 and all subsequent years.

DATA