

Supplementary Materials

Soil and Tree Nutrient Status of High Elevation Mixed Red Spruce (*Picea rubens* Sarg.) and Broadleaf Deciduous Forests

Philip M. Crim ^{1,2*}, Louis M. McDonald ³ and Jonathan R. Cumming ²

¹ Department of Physical and Natural Sciences, The College of Saint Rose, Albany, NY 12203, USA

² Department of Biology, West Virginia University, Morgantown, WV 26506, USA; jcumming@wvu.edu

³ Division of Plant and Soil Sciences, West Virginia University, Morgantown, WV 26506, USA;
lmmcdonald@mail.wvu.edu

* Correspondence: pcrim@strose.edu; Tel.: +1-518-454-2910

Received: 5 September 2019; Accepted: 9 December 2019; Published: 11 December 2019

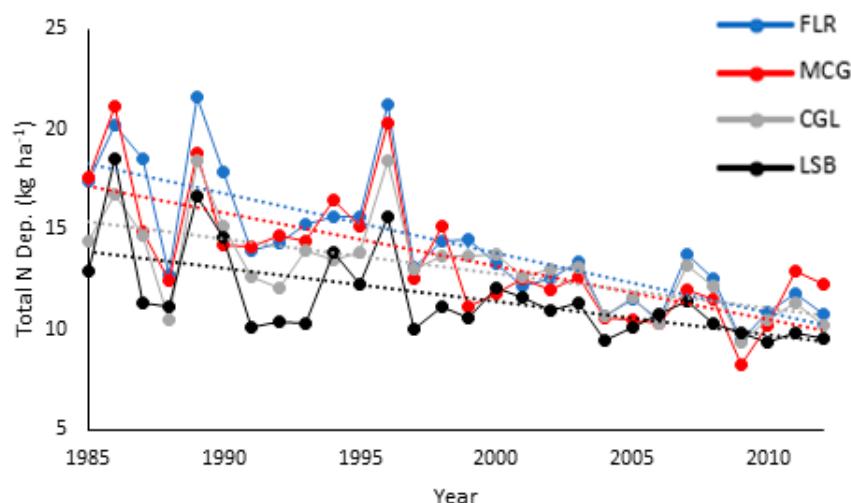


Figure S1. Annual variation in total N deposition from 1985–2012 at Flat Ridge (FLR), McGowan Mountain (MCG), Cranberry Glades (CGL), and Little Spruce Bog (LSB).

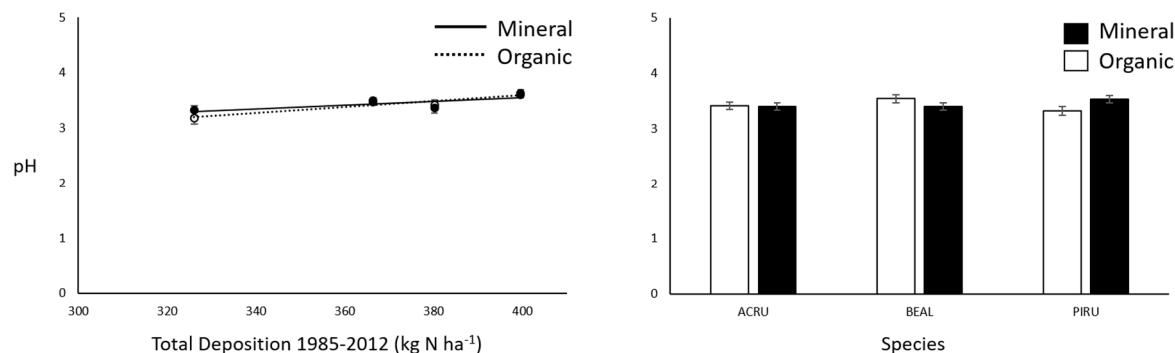


Figure S2. Soil pH as functions of soil fraction and N deposition (left) and overstory tree species (right).

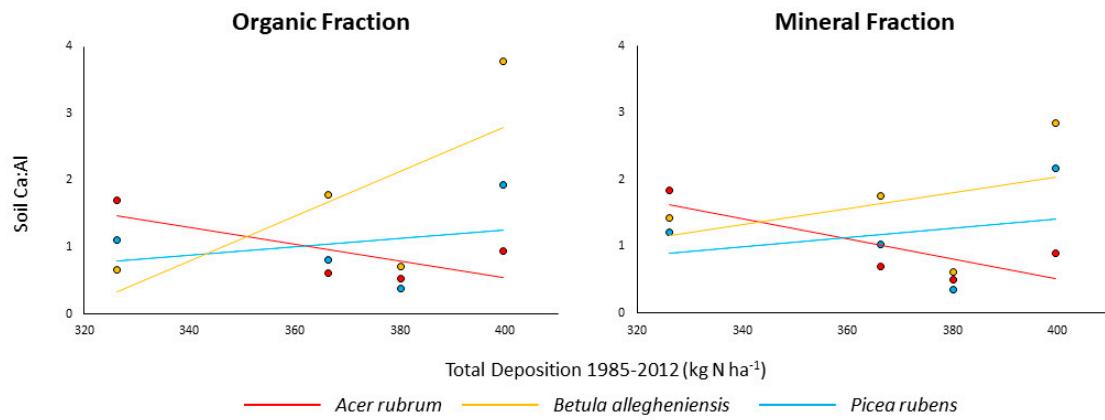


Figure S3. Soil Ca:Al molar ratios by N deposition and overstory tree species for organic (left) and mineral (right) fractions.

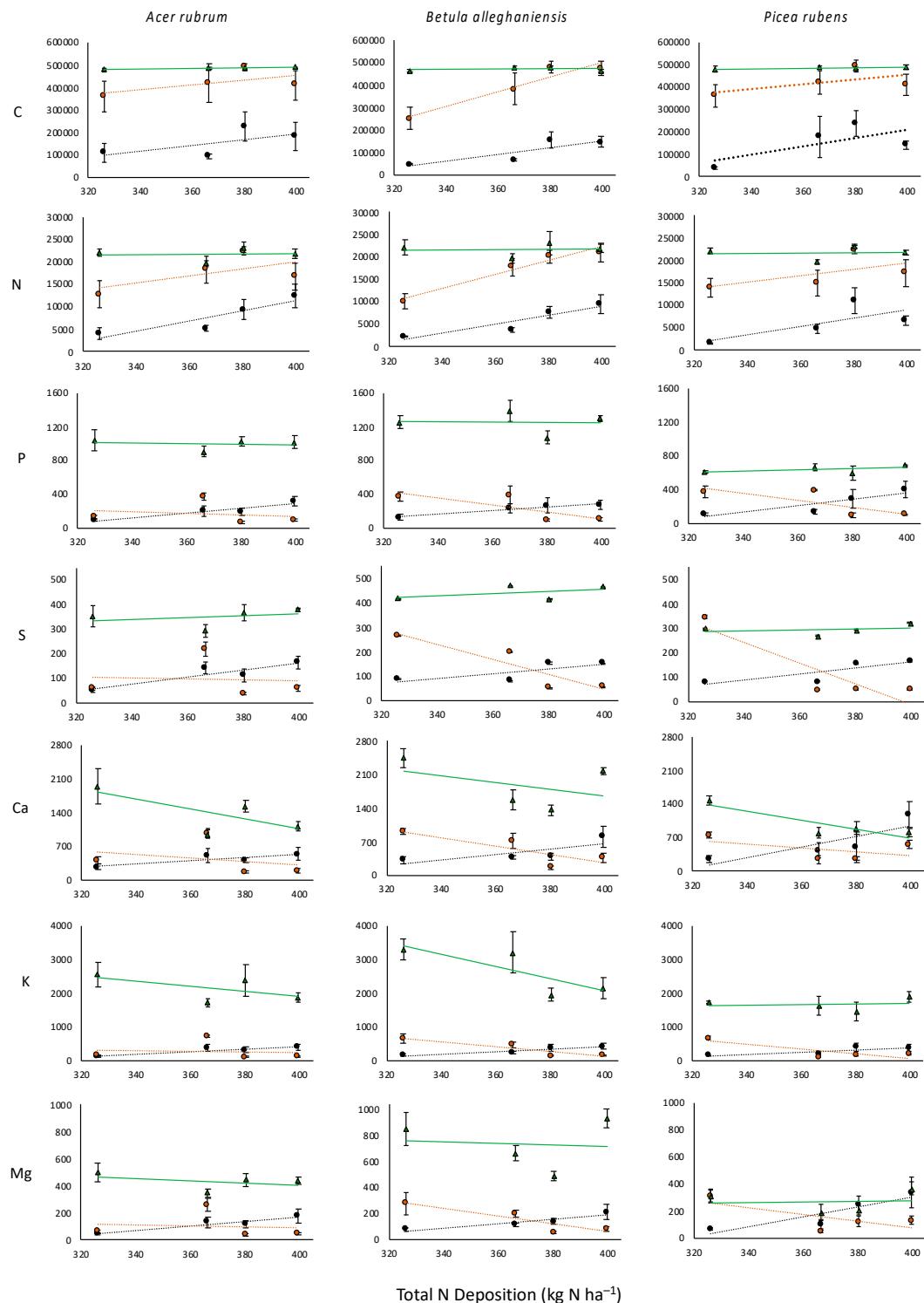


Figure S4a. Soil macro-element concentrations in foliage, and both organic and mineral soil fractions (mg g⁻¹) by forest tree species and modeled estimates of historic N deposition.

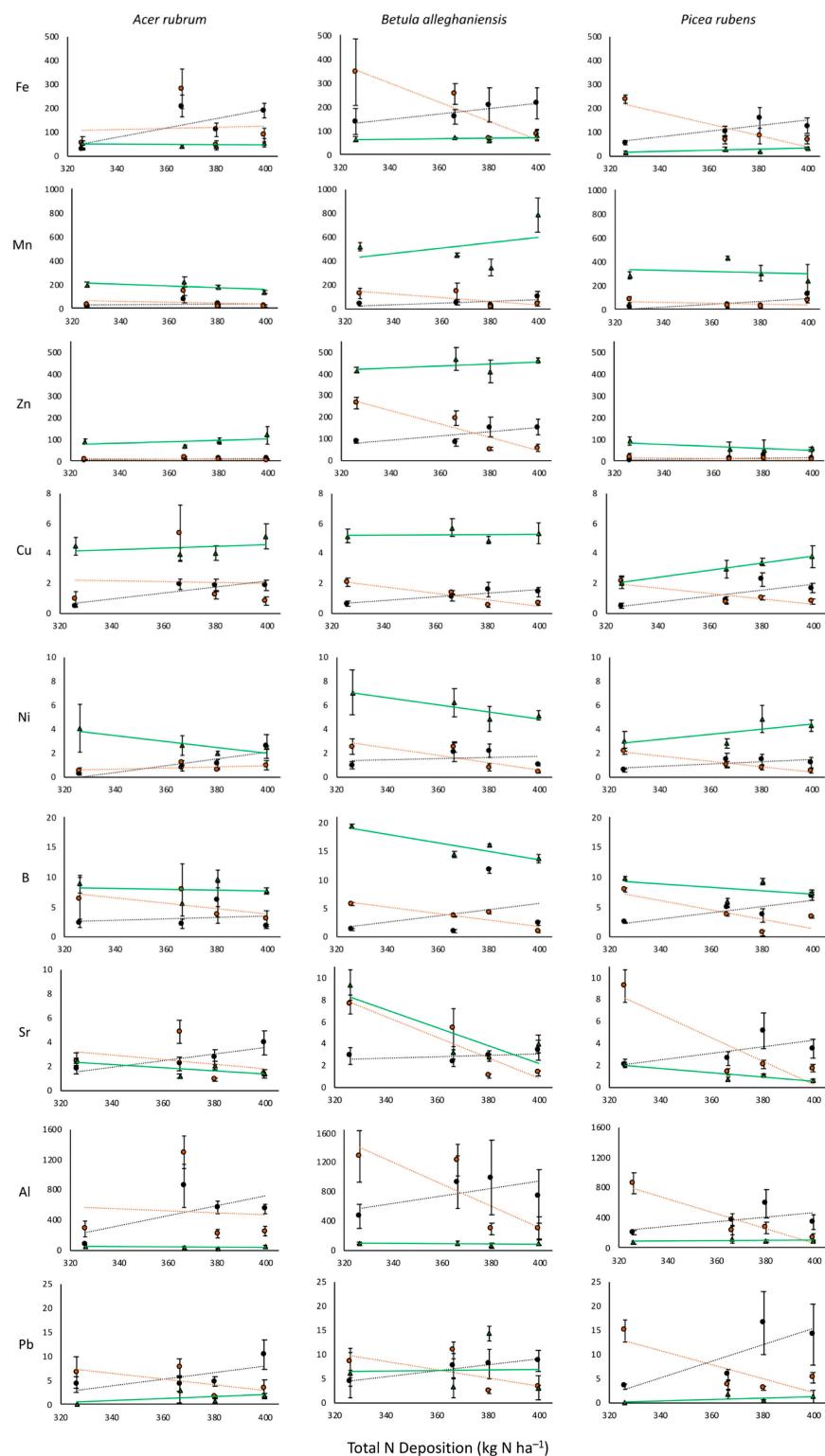


Figure S4b. Soil micro-element concentrations in foliage, and both organic and mineral soil fractions (mg g⁻¹) by forest tree species and modeled estimates of historic N deposition.