Supplemental material for SSSAJ article “Pedogenic Pathways in Andic Soils of the Northern Rocky Mountains (USA)” by P. McDaniel, M. Ross, J. Jimenez, D. Strawn, M. Valerio, M.J. Kimsey, and A. Falen

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Supplemental Fig. S1. Scanning electron micrograph of a Mazama glass shard collected from the very fine sand fraction of a Bw horizon of a forested Andisol (Udivitrand) from Clearwater County, northern Idaho (46.8058°, −116.3236°). The vesicular structure is indicative of a highly explosive eruption of silica-rich material.
Supplemental Fig. S2. EXAFS spectra of the colloidal fraction of the Bw horizon of a Udivitrand from Clearwater County, northern Idaho (46.8089°, −116.3235°). Iron K-edge EXAFS data were collected at Stanford Synchrotron Radiation Laboratory on Beamline 4–2 and linear combination fitting was done using a reference set of Fe mineral standards that commonly occur in soils. Dashed line is the best fit using a linear combination of ferrihydrite (52%), smectite clay (19%), and goethite (16%); the fit of other Fe minerals was less than 10% and therefore below the method detection limit (D.G. Strawn, unpublished data).
Supplemental Fig. S3. Distribution of aboveground (frond/stem) and belowground (rhizome) biomass in bracken fern glades from three locations in northern Idaho (Table 3). Values for each location represent the mean of three plots of 1 m by 1 m by 0.5 m. Data are from Jimenez (2005).