



Supplement of

A new synthesis for terrestrial nitrogen inputs

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Supplemental Table: Summary of ecosystem nitrogen accretion values from Binkey et al. (2000) and Johnson et al. (2014). The lithology at each study site was evaluated for potential N enrichment given the type of host rock.

Reference(s)	Location	N accretion (kg ha ⁻¹ yr ⁻¹)	Parent Material	Parent Material N Potential	Notes
Bormann et al. (1993)	Hubbard Brook Experimental Forest (Sandbox), New Hampshire, USA	60 to 152	alluvium (low N)	No	
Dickson & Crocker (1953), Sollins et al. (1983)	Mt. Shasta, California, USA	5 to 60	Mudflow (Volcanic: mafic-intermediate)	No	unknown if mudflows contain N from soils/vegetation caught up in flow?
Turner and Lambert (2011)	Sunny Corner Forest, New South Wales, AU	13 to 22	Volcanic (felsic)	No	Included only RONOBO and RONOBO treatments.
Morrison and Foster (2001)	Turkey Lakes, Ontario, CA	16	Igneous/Meta-igneous (Greestone and Granite)	No	
Richter and Markewitz (2000)	Calhoun Forests, South Carolina, USA	0 to 14	Granodiorite	No	
Bormann & Likens (1977)	Hubbard Brook Experimental Forest, New Hampshire, USA	14	high-grade metasedimentary (amphibolite)	No	
Alriksson & Olsson (1995)	Southern Sweden	-18 to 12	Granite	No	
Garcia-Montiel (1996)	Luquillo Experimental Forest, Puerto Rico	-5.7 to 6.2	Tuff Breccia	No	
Aguilera et al. (1993)	H. J. Andrews Research Research Forest, Blue River, Oregon, USA.	2 to 3	Volcanic: mafic-intermediate	No	
Johnson et al . (1995)	Hubbard Brook Experimental Forest, New Hampshire, USA	0	high-grade metasedimentary (amphibolite)	No	
Knoepp & Swank (1997)	Coweeta Hydrologic Laboratory, North Carolina, USA	-60 to -50	high-grade meta-igneous & metasedimentary (amphibolite)	No	
Fisher & Eastburn (1974)	Illinois, USA	0 to 110	Sedimentary (siliciclastic and carbonate)	Yes	Parent material inferred from soil series description in paper
Johnson & Todd (1998)	Walker Branch Watershed, Tennessee, USA	44 to 87	Sedimentary (carbonate and siliciclastic)	Yes	
Eriksson & Rosen (1994)	Susegården, Halmstad, Sweden	0 to 50	Till	Yes	
Day et al. (1975)	Broadbalk experiment, Rothamsted, UK	48	Sedimentary (carbonate/marl)	Yes	
Johnson et al. (2007)	Walker Branch Watershed, Tennessee, USA	-15 to 43	Sedimentary (carbonate and siliciclastic)	Yes	
Son & Gower (1992)	Coulee Experimental Forest, Wisconsin, USA	10 to 40	Sedimentary (siliciclastic and carbonate)	Yes	
Turner et al. (2002), Binkley et al. (2003)	Penrose State Forest, New South Wales, AU	16 to 24	Sedimentary (Siliciclastic)	Yes	

Supplemental Table: Continued.

Reference(s)	Location	N accretion (kg ha ⁻¹ yr ⁻¹)	Parent Material N		Notes
			Parent Material	Potential	
Jorgensen & Wells (1971), Binkley et al.(1992)	Westvaco experimental forest, South Carolina, USA	0 to 23	alluvium (sedimentary provenance)	Yes	
Turner & Lambert (2013)	Lidsdale State Forest, Sydney, AU	20.4	Sedimentary (Siliciclastic)	Yes	
Johnson et al (2003b)	Walker Branch Watershed, Tennessee, USA	20	Sedimentary (carbonate and siliciclastic)	Yes	
Guo et al. (2008)	Kowen Forest, Australian Capital Territory, AU	17.2	Sedimentary (Siliciclastic)	Yes	
Turner & Lambert (1986)	Belango State Forest, New South Wales, AU	17	Sedimentary (Siliciclastic)	Yes	
Trettin & Johnson (2000)	Walker Branch Watershed, Tennessee, USA	-76 to 6	Sedimentary (carbonate and siliciclastic)	Yes	
Hopmans & Elms (2009)	Victoria, Australia	4.2	Sedimentary (carbonate and siliciclastic)	Yes	
Kiser (2009)	Camp Branch Experimental Watershed, Tennessee, USA	3	Sedimentary (Siliciclastic)	Yes	
Johnson et al. (2003a)	Kennedy Space Center, Florida USA	-32 to -3	Quaternary alluvium	Yes	
Jenny (1980), Dormar & Lutwick (1966)	Alberta, Canada	-90	Sedimentary (Siliciclastic)	Yes	
Turvey & Smethurst (1988)	Victoria, Australia	0	unknown	unknown	reference unavailable (excluded from plot)
Bacon et al. (1996)	Whiporie, New South Wales, AU	10.1	Unknown	Unknown	reference unavailable (excluded from plot)
Turner & Lambert (2012)	Lidsdale, New South Wales, AU	8.5	Unknown	Unknown	Either Granite or siliciclastic (excluded from plot)
Mroz et al. (1985)	Upper Michigan	-450	alluvium (sedimentary provenance)	Yes	Soil Removal drove N loss (excluded from plot)