

TABLE 13
THE NITROGEN, PHOSPHORUS AND POTASSIUM CONTENT OF LEAVES FROM FOREST TREES GROWING ON VARIOUS SITES THROUGHOUT THE NORTHEAST¹

Location of Plot	Plot Number	Red Oak ²	Spanish Oak ²	Black Oak ²	Post Oak ²	Carroll Oak ²	White Oak ²	Chestnut Oak ²	Sugar Maple ²	Red Maple ²	Black Birch ²	Paper Birch ²	Yellow Birch ²	Beech ²	Yellow Poplar ²	White Ash ²	Pignut Hickory ²	Basswood ²	Beech ²	Black Gum ²	Trembling Aspen ²	Large-toothed Aspen ²	Ironwood ²	
Bartlett Experimental Forest (North-eastern For. Expt. Sta., U.S.F.S.) near Bartlett, N. H. ³	FS-1-A	1.60*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	1.85*	
	FS-1-B	1.47*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*	2.01*
Chenango Experimental Forest (North-eastern For. Expt. Sta., U.S.F.S.) near Smyrna, N. Y. ³	FS-2-A	2.64*	0.21	1.58	1.80	0.25	1.85	1.77*	0.34	1.96	1.80	0.25	1.85	1.77*	0.34	1.96	1.80	0.25	1.85	1.77*	0.34	1.96	1.80	0.25
	FS-2-B	2.68*	0.21	1.96	1.80	0.34	1.96	1.77*	0.34	1.96	1.80	0.25	1.85	1.77*	0.34	1.96	1.80	0.25	1.85	1.77*	0.34	1.96	1.80	0.25
Green Bank State Forest, New Jersey ⁴	FS-3-A	2.18†	1.97	2.09†	2.15	0.12	0.13	0.17	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44
Bass River State Forest, New Jersey ⁴	FS-3-B	1.98*	0.10	1.09	1.04	0.14	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
Lebanon State Forest, New Jersey ⁵	FS-4-A	1.83*	0.13	1.54	1.91*	0.18	0.16	1.57	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83
	FS-4-B	1.82*	0.12	1.59	1.92*	0.19	1.57	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83
Belleplain State Forest, New Jersey ⁵	FS-5-A	1.81*	0.10	1.38	1.78*	0.10	0.13	1.35	1.64†	0.12	0.89	1.64†	0.12	0.89	1.64†	0.12	0.89	1.64†	0.12	0.89	1.64†	0.12	0.89	1.64†
	FS-5-B	1.64*	0.11	1.35	1.81*	0.10	0.14	1.45	1.58†	0.11	1.05	1.58†	0.11	1.05	1.58†	0.11	1.05	1.58†	0.11	1.05	1.58†	0.11	1.05	1.58†
Stokes State Forest, New Jersey ⁵	FS-6-A	1.97*	0.18	1.61	2.07†	0.25	0.22	1.62	1.94*	0.27	1.51	2.22*	0.27	1.51	1.93*	0.21	1.90	1.73†	0.16	1.34	1.73†	0.16	1.34	1.73†
	FS-6-B	2.17*	0.20	1.68	1.98*	0.21	0.20	1.67	2.21†	0.27	1.74	2.24*	0.27	1.74	2.24*	0.27	1.74	2.24*	0.27	1.74	2.24*	0.27	1.74	2.24*
Jenny Jump State Forest, New Jersey ⁵	FS-7-A	2.07	0.18	2.14	1.89†	0.16	0.16	1.40	2.01†	0.21	1.50	2.05	0.19	1.50	1.64†	0.17	0.31	1.64†	0.17	0.31	1.64†	0.17	0.31	1.64†
	FS-7-B	2.21*	0.21	1.69	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15
Near Almond, New York ⁶	FS-8-A	1.99*	0.29	1.75	1.99*	0.29	1.75	1.99*	0.29	1.75	1.99*	0.29	1.75	1.99*	0.29	1.75	1.99*	0.29	1.75	1.99*	0.29	1.75	1.99*	0.29
	FS-8-B	1.42*	0.30	1.52	1.81*	0.18	1.64	1.81*	0.18	1.64	1.81*	0.18	1.64	1.81*	0.18	1.64	1.81*	0.18	1.64	1.81*	0.18	1.64	1.81*	0.18
Missouri Branch, West Virginia ⁷	FS-9-A	2.32	0.15	1.75	2.32	0.15	1.75	2.32	0.15	1.75	2.32	0.15	1.75	2.32	0.15	1.75	2.32	0.15	1.75	2.32	0.15	1.75	2.32	0.15
	FS-9-B	2.22	0.12	1.41	2.01†	0.12	1.28	2.01†	0.12	1.28	2.01†	0.12	1.28	2.01†	0.12	1.28	2.01†	0.12	1.28	2.01†	0.12	1.28	2.01†	0.12
Harvard Forest, Petersham, Mass. ⁸	FS-10-A	2.09*	0.15	1.30	1.49*	0.13	1.54	2.14†	0.16	1.46	2.14†	0.16	1.46	2.14†	0.16	1.46	2.14†	0.16	1.46	2.14†	0.16	1.46	2.14†	0.16
	FS-10-B	2.24*	0.21	1.30	1.76†	0.31	2.12	2.19†	0.21	1.81	2.19†	0.21	1.81	2.19†	0.21	1.81	2.19†	0.21	1.81	2.19†	0.21	1.81	2.19†	0.21
New York State College of Forestry Experiment Station, South of Syracuse, N. Y. ⁹	FS-11-A	2.35*	0.22	1.32	1.95†	0.21	1.17	1.68	0.49	2.27	2.10	0.27	1.99	2.12†	0.25	1.44	2.12†	0.25	1.44	2.12†	0.25	1.44	2.12†	0.25
	FS-11-B	2.21*	0.21	1.69	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15	1.62	1.86†	0.15
Cove type (cf. 1, Raup's (1938) Section A), Black Rock Forest ¹⁰	E-1	2.06*	0.16	1.23	2.06*	0.16	1.23	2.06*	0.16	1.23	2.06*	0.16	1.23	2.06*	0.16	1.23	2.06*	0.16	1.23	2.06*	0.16	1.23	2.06*	0.16
Lower slope site (cf. Raup's type 2, Section A), Black Rock Forest ¹⁰	E-2	2.08*	0.18	1.27	2.08*	0.18	1.27	2.08*	0.18	1.27	2.08*	0.18	1.27	2.08*	0.18	1.27	2.08*	0.18	1.27	2.08*	0.18	1.27	2.08*	0.18
Upper slope site (cf. Raup's type 3, Section A), Black Rock Forest ¹⁰	E-3	1.86*	0.17	1.20	1.86*	0.17	1.20	1.86*	0.17	1.20	1.86*	0.17	1.20	1.86*	0.17	1.20	1.86*	0.17	1.20	1.86*	0.17	1.20	1.86*	0.17
White Oak—Hickory type (cf. 4, Raup's Section A), Black Rock Forest ¹⁰	E-4	2.10*	0.19	1.37	2.20*	0.22	1.62	2.20*	0.22	1.62	2.20*	0.22	1.62	2.20*	0.22	1.62	2.20*	0.22	1.62	2.20*	0.22	1.62	2.20*	0.22
Upper slope site (cf. Raup's type 2, Section AA), Black Rock Forest ¹⁰	E-5	1.91*	0.13	1.36	1.91*	0.13	1.36	1.91*	0.13	1.36	1.91*	0.13	1.36	1.91*	0.13	1.36	1.91*	0.13	1.36	1.91*	0.13	1.36	1.91*	0.13
Cove type (cf. 4, Raup's Section AA), Black Rock Forest ¹⁰	E-6	2.12*	0.20	1.80	2.12*	0.20	1.80	2.12*	0.20	1.80	2.12*	0.20	1.80	2.12*	0.20	1.80	2.12*	0.20	1.80	2.12*	0.20	1.80	2.12*	0.20
White Oak type (cf. 4, Raup's Section F), Black Rock Forest ¹⁰	E-7	1.99*	0.17	1.12	2.36*	0.24	1.57	2.36*	0.24	1.57	2.36*	0.24	1.57	2.36*	0.24	1.57	2.36*	0.24	1.57	2.36*	0.24	1.57	2.36*	0.24
Red Maple swale (about 3, Raup's Section F), Black Rock Forest ¹⁰	E-8	2.01*	0.16	1.35	2.01*	0.16	1.35	2.01*	0.16	1.35	2.01*	0.16	1.35	2.01*	0.16	1.35	2.01*	0.16	1.35	2.01*	0.16	1.35	2.01*	0.16
Cove type near intersection of White-oak Trail and Bog Meadow Road (cf. map, Raup, 1938), Black Rock Forest ¹⁰	E-9	2.14*	0.17	1.57	2.14*	0.17	1.57	2.14*	0.17	1.57	2.14*	0.17	1.57	2.14*	0.17	1.57	2.14*	0.17	1.57	2.14*	0.17	1.57	2.14*	0.17
Cove type near intersection of Canterbury Brook and Hulse Road (cf. map, Raup, 1938), Black Rock Forest ¹⁰	E-10	2.20*	0.16	1.36	2.20*	0.16	1.36	2.20*	0.16	1.36	2.20*	0.16	1.36	2.20*	0.16	1.36	2.20*	0.16	1.36	2.20*	0.16	1.36	2.20*	0.16
Mid-slope site above Frog Hill, Black Rock Forest ¹⁰	E-11	2.14*	0.22	1.63	1.49	0.47	2.43	1.49	0.47	2.43	1.49	0.47	2.43	1.49	0.47	2.43	1.49	0.47	2.43	1.49	0.47	2.43	1.49	0.47
Ridge site above Clark Lot, Black Rock Forest ¹⁰	E-12	1.89*	0.19	1.17	1.89*	0.19	1.17	1.89*	0.19	1.17	1.89*	0.19	1.17	1.89*	0.19	1.17	1.89*	0.19	1.17	1.89*	0.19	1.17	1.89*	0.19
Mid-slope site above Clark Lot, Black Rock Forest ¹⁰	E-13	1.89*	0.18	1.51	1.89*	0.18	1.51	1.89*	0.18	1.51	1.89*	0.18	1.51	1.89*	0.18	1.51	1.89*	0.18	1.51	1.89*	0.18	1.51	1.89*	0.18
Mid-slope site above Clark Lot, Black Rock Forest ¹⁰	E-14	1.92*	0.21	1.18	1.92*	0.21	1.18	1.92*	0.21	1.18	1.92*	0.21	1.18	1.92*	0.21	1.18	1.92*	0.21	1.18	1.92*	0.21	1.18	1.92*	0.21
Lower slope site above Aleck Meadow Reservoir, Black Rock Forest ¹⁰	E-15	1.73*	0.16	1.42	1.96*	0.24	1.37	2.04*	0.33	1.57	1.60	0.28	1.57	1.60	0.28	1.57	1.60	0.28	1.57	1.60	0.28	1.57	1.60	0.28
Mid-slope site below Frog Hill, Black Rock Forest ¹⁰	E-16	1.66*	0.15	1.79	2.00	0.18	1.79	1.99	0.20	1.38	1.38	0.18	1.38	1.70*	0.14	1.74*	1.53	0.12	2.03	1.55	0.19	1.55	0.19	1.55
Private woodlot near Mountainville, N. Y. ¹¹	E-17	2.22*	0.17	2.02	2.22*	0.21	1.84	2.22*	0.21	1.84	2.22*	0.21	1.84	2.22*	0.21	1.84	2.22*	0.21	1.84	2.22*	0.21	1.84	2.22*	0.21
Private woodlot near Cornwall-on-Hudson, N. Y. ¹¹	E-18	1.50*	0.17	0.79	2.23*	0.14	0.85	2.23*	0.14	0.85	2.23*	0.14	0.85	2.23*	0.14	0.85	2.23*	0.14	0.85	2.23*	0.14	0.85	2.23*	0.14
Private Estate near Pittsburgh, Pa. ¹¹	E-19	1.50*	0.17	0.79	1.65*	0.18	0.63	1.65*	0.18	0.63	1.65*	0.18	0.63	1.65*	0.18	0.63	1.65*	0.18	0.63	1.65*	0.18	0.63	1.65*	0.18
Grounds of New York Military Academy, Cornwall-on-Hudson, N. Y. ¹¹	E-20	1.88*	0.14	0.69	1.88*	0.14	0.69	1.88*	0.14	0.69	1.88*	0.14	0.69	1.88*	0.14	0.69	1.88*	0.14	0.69	1.88*	0.14	0.69	1.88*	0.14
Private estate near Cornwall-on-Hudson, N. Y. ¹¹	E-22	2.26†	0.14	0.76	2.22†	0.16	1.05	2.22†	0.24	0.80	1.85†	0.23	0.56	2.01†	0.12	1.08	2.01†	0.12	1.08	2.01†	0.12	1.08	2.01†	0.12
Mid-slope site below Frog Hill, Black Rock Forest ¹⁰	E-23	2.09*	0.14	1.77	2.15†	0.17	1.44	2.44†	0.32	1.34	1.68†	0.23	1.96†	2.06	0.15	1.87	2.17†	0.16	1.87	2.17†	0.16	1.87	2.17†	0.16
Mid-slope site east of Continental Road, Black Rock Forest ¹⁰	E-24	2.02*	0.18																					