

Big River Chestnuts: Logan Labs Soil Test Data

Parameters	March 2018			June 2019		June 2020			June 2021			June 2022		
	NE Field	NW Field	South Field	North Field	South Field	N	S	SE Bank	N	S	SE Bank	N	S	SE Bank
Organic Matter (%)	2.83	2.51	2.53	2.54	2.71	2.23	2.19	2.61	2.72	2.34	2.99	2.53	2.77	2.46
Total Exchange Capacity (M.E.)	8.94	6.40	7.53	4.27	4.09	5.00	5.83	4.07	5.17	5.64	3.79	3.88	5.29	1.99
pH	7.0	6.7	6.4	7.0	7.0	6.7	6.8	5.3	6.7	6.8	5.8	7.2	6.5	6.1
Sulfur (p.p.m)	8	8	8	16	15	7	16	24	24	14	20	28	17	17
Mehlich III Phosphorous (as p2O5 lbs/acre)	338	740	651	773	592	558	874	1035	589	690	1042	703	751	1003
Calcium (lb/acre) - Desired Value	2431	1741	2047	1161	1112	1361	1586	1108	1405	1532	1030	1055	1439	541
Calcium - Value Found	2810	1812	1979	1227	1153	1386	1615	505	1416	1563	830	1079	1360	458
Calcium - Deficit			-68					-605			-200			
Magnesium (lb/acre) - Desired Value	257	200	216	200	200	200	200	200	200	200	200	200	200	200
Magnesium - Value Found	316	252	288	181	188	211	248	62	212	238	109	185	213	71
Magnesium - Deficit				-19	-12			-138			-91			
Potassium (lb/acre) - Desired Value	278	200	234	200	200	200	200	200	200	200	200	200	200	200
Potassium - Value Found	103	131	205	72	80	85	153	450	144	170	124	142	228	95
Potassium - Deficit	-175	-69	-29	-128	-120	-115	-47		-56	-30	-76			
Sodium (lb/acre)	33	30	30	77	64	43	56	110	39	41	39	30	26	25
Calcium (60 to 70%)	78.58	70.73	65.71	71.83	70.49	69.24	69.22	30.86	68.49	69.34	54.78	69.5	64.23	57.53
Magnesium (10 to 20%)	14.73	16.39	15.94	17.66	19.16	17.57	17.72	6.34	17.09	17.60	11.99	19.86	16.76	14.86
Potassium (2 to 5%)	1.48	2.62	3.49	2.16	2.51	2.18	3.36	14.16	3.57	3.87	4.20	4.69	5.52	6.12
Sodium (.5 to 3%)	0.80	1.02	0.86	3.91	3.43	1.86	2.09	5.85	1.65	1.57	2.23	1.67	1.07	2.69
Other Bases (variable)	4.40	4.70	5.00	4.40	4.40	4.70	4.60	6.80	4.70	4.60	5.80	4.20	4.90	5.20
Exchangable Hydrogen (10 to 15%)	0.00	4.50	9.00	0.00	0.00	4.50	3.00	36.00	4.50	3.00	21.00	0.00	7.50	13.50
Boron (p.p.m.)	0.23	0.22	0.22	0.49	0.39	0.32	0.4	0.34	0.44	0.46	0.43	<0.2	<0.2	<0.2
Iron (p.p.m.)	317	359	371	259	244	236	283	265	229	249	240	233	224	251
Manganese (p.p.m.)	64	42	54	33	45	34	47	17	24	28	17	48	51	21
Copper (p.p.m.)	3.72	4.48	4.83	3.83	3.51	3.51	3.9	2.2	3.18	3.21	2.1	3.68	4.01	1.92
Zinc (p.p.m.)	1.47	1.47	1.58	2.04	2.25	0.52	0.67	1.24	0.9	0.99	1.94	1.76	1.51	3.67
Aluminum (p.p.m.)	739	789	786	640	603	892	856	1344	866	888	1171	768	739	900