

Appendix 4H. Species richness for benthic macroinvertebrates in samples collected at the study sites in Surry County, North Carolina, 2004-2007. [SR, secondary road; EPT\_CH, ratio of EPT richness to Chironomidae richness; ORTHO\_CHR, ratio of Orthoclaadiinae richness to Chironomidae richness; TANY\_CHR, ratio of Tanytarsini richness to Chironomidae richness]

Transect	Total richness	Ephemeroptera, Plecoptera, and Trichoptera	EPT_CH	Ephemeroptera (mayflies)	Plectoptera (stoneflies)	Pteryonarcys (salmonflies)	Trichoptera (caddisflies)	Odonata	Coleoptera	Diptera	Chironomidae (midges)	Orthocladinae midges	ORTHO_CHR	Tanytarsini midges	TANY_CHR	Non-midge Diptera	Non-insects	Non-midge diptera and non-insects	Mollusca and Crustaceae	Gastropoda	Bivalvia	Corbicula	Amphipoda	Isopoda	Oligochaeta
Hogan Creek at SR 2038 near Siloam, North Carolina (control site)																									
Sample collection date March 24, 2004																									
A	28	5	0.29	2	1	0	2	0	2	20	17	9	0.53	4	0.24	3	1	4	0	0	0	0	0	0	1
B	30	14	1.56	5	4	0	5	1	4	11	9	5	0.56	1	0.11	2	0	2	0	0	0	0	0	0	0
C	25	12	1.71	3	4	0	5	0	3	10	7	4	0.57	2	0.29	3	0	3	0	0	0	0	0	0	0
D	37	19	1.90	8	5	0	6	0	4	12	10	5	0.50	3	0.30	2	2	4	1	0	0	0	0	0	0
E	34	14	1.27	5	5	0	4	0	3	16	11	6	0.55	3	0.27	5	1	6	0	0	0	0	0	0	1
Sample collection date February 16, 2005																									
A	28	12	1.71	4	5	0	3	0	3	9	7	4	0.57	1	0.14	2	4	6	1	0	1	0	0	0	2
B	31	11	1.10	3	5	0	3	0	4	14	10	8	0.80	1	0.10	4	2	6	0	0	0	0	0	0	1
C	39	15	1.15	4	5	0	6	0	2	18	13	6	0.46	3	0.23	5	4	9	1	1	0	0	0	0	2
D	36	15	1.36	7	4	0	4	0	3	14	11	8	0.73	0	0.00	3	4	7	1	1	0	0	0	0	1
E	30	11	1.00	5	4	0	2	0	2	14	11	8	0.73	1	0.09	3	2	5	0	0	0	0	0	0	2
Sample collection date March 8, 2006																									
A	23	6	0.55	3	1	0	2	0	2	13	11	6	0.55	2	0.18	2	2	4	1	1	0	0	0	0	0
B	33	11	0.85	5	2	0	4	0	2	18	13	5	0.38	3	0.23	5	2	7	0	0	0	0	0	0	0
C	26	10	1.25	3	4	0	3	0	2	10	8	4	0.50	1	0.13	2	3	5	0	0	0	0	0	0	1
D	28	12	1.20	7	3	0	2	0	2	13	10	5	0.50	2	0.20	3	1	4	0	0	0	0	0	0	0
E	31	12	1.20	5	2	0	5	0	1	14	10	4	0.40	2	0.20	4	4	8	0	0	0	0	0	0	2
Sample collection date March 20, 2007																									
A	34	14	1.75	4	4	0	6	0	4	12	8	3	0.38	2	0.25	4	4	8	2	2	0	0	0	0	0
B	26	14	2.33	4	5	0	5	0	2	9	6	3	0.50	1	0.17	3	1	4	0	0	0	0	0	0	0
C	20	9	1.80	4	3	0	2	0	2	7	5	2	0.40	1	0.20	2	2	4	1	1	0	0	0	0	0
D	30	11	1.00	4	3	0	4	0	3	13	11	5	0.45	2	0.18	2	3	5	0	0	0	0	0	0	2
E	28	10	1.11	3	3	0	4	0	2	14	9	5	0.56	1	0.11	5	2	7	0	0	0	0	0	0	1

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Transect	Total richness	Ephemeroptera, Plecoptera, and Trichoptera	EPT_CH	Ephemeroptera (mayflies)	Plecoptera (stoneflies)	Pteryonarcys (salmonflies)	Trichoptera (caddisflies)	Odonata	Coleoptera	Diptera	Chironomidae (midges)	Orthoclaadiinae midges	ORTHO_CHR	Tantytarsini midges	TANY_CHR	Non-midge Diptera	Non-insects	Non-midge diptera and non-insects	Mollusca and Crustaceae	Gastropoda	Bivalvia	Corbicula	Amphipoda	Isopoda	Oligochaeta
Bull Creek at Ash Hill, North Carolina																									
Sample collection date 03/24/2004																									
A	34	12	0.75	5	4	0	3	0	1	19	16	10	0.63	1	0.06	3	2	5	0	0	0	0	0	0	2
B	27	10	1.00	6	3	0	1	1	1	13	10	5	0.50	2	0.20	3	2	5	0	0	0	0	0	0	1
C	28	6	0.43	3	1	0	2	0	1	18	14	11	0.79	1	0.07	4	2	6	0	0	0	0	0	0	1
D	23	8	0.73	3	2	0	3	0	1	14	11	6	0.55	2	0.18	3	0	3	0	0	0	0	0	0	0
E	24	8	0.73	3	1	0	4	0	1	14	11	7	0.64	2	0.18	3	1	4	0	0	0	0	0	0	0
Sample collection date 02/16/2005																									
A	45	12	0.63	4	3	0	5	0	3	24	19	12	0.63	3	0.16	5	6	11	2	2	0	0	0	0	2
B	37	9	0.56	5	3	0	1	2	1	20	16	8	0.50	3	0.19	4	4	8	0	0	0	0	0	0	2
C	36	11	0.79	5	2	0	4	0	1	18	14	8	0.57	4	0.29	4	5	9	0	0	0	0	0	0	2
D	40	11	0.65	5	2	0	4	0	2	21	17	10	0.59	4	0.24	4	4	8	0	0	0	0	0	0	2
E	37	15	1.36	6	4	0	5	0	3	14	11	7	0.64	3	0.27	3	3	6	0	0	0	0	0	0	1
Sample collection date 03/08/2006																									
A	31	8	0.73	4	1	0	3	0	6	14	11	7	0.64	2	0.18	3	2	5	0	0	0	0	0	0	0
B	34	8	0.89	3	1	0	4	2	2	13	9	6	0.67	2	0.22	4	7	11	2	0	1	0	0	0	2
C	26	8	1.00	4	1	0	3	0	2	12	8	4	0.50	3	0.38	4	3	7	0	0	0	0	0	0	0
D	26	10	1.67	5	1	0	4	0	3	9	6	4	0.67	2	0.33	3	3	6	0	0	0	0	0	0	0
E	31	7	0.54	4	1	0	2	0	2	16	13	8	0.62	4	0.31	3	4	7	0	0	0	0	0	0	1
Sample collection date 03/21/2007																									
A	40	11	0.73	5	2	0	4	0	6	19	15	9	0.60	3	0.20	4	3	7	0	0	0	0	0	0	1
B	37	7	0.47	3	1	0	3	0	5	18	15	9	0.60	3	0.20	3	6	9	1	0	1	0	0	0	2
C	36	8	0.42	3	1	0	4	0	3	22	19	10	0.53	3	0.16	3	1	4	0	0	0	0	0	0	0
D	36	6	0.33	2	2	0	2	0	3	23	18	10	0.56	3	0.17	5	3	8	1	0	1	0	0	0	0
E	32	5	0.36	2	1	0	2	0	3	18	14	8	0.57	2	0.14	4	5	9	1	0	1	0	0	0	1

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Transect	Total richness	Ephemeroptera, Plecoptera, and Trichoptera	EPT_CH	Ephemeroptera (mayflies)	Plecoptera (stoneflies)	Pteryonarcys (salmonflies)	Trichoptera (caddisflies)	Odonata	Coleoptera	Diptera	Chironomidae (midges)	Orthoclaadiinae midges	ORTHO_CHR	Tanytarsini midges	TANY_CHR	Non-midge Diptera	Non-insects	Non-midge diptera and non-insects	Mollusca and Crustaceae	Gastropoda	Bivalvia	Corbicula	Amphipoda	Isopoda	Oligochaeta
Pauls Creek above SR 1625 near Pine Ridge, North Carolina																									
Sample collection date March 23, 2004																									
A	34	15	1.36	9	3	0	3	0	2	14	11	6	0.55	1	0.09	3	3	6	1	0	0	0	0	0	1
B	25	12	1.71	6	3	0	3	0	1	10	7	5	0.71	0	0.00	3	2	5	0	0	0	0	0	0	1
C	33	16	1.45	6	6	0	4	0	2	14	11	6	0.55	3	0.27	3	1	4	0	0	0	0	0	0	1
D	29	18	2.00	6	9	0	3	0	0	10	9	4	0.44	0	0.00	1	1	2	0	0	0	0	0	0	1
E	31	16	1.45	8	6	0	2	0	1	13	11	5	0.45	1	0.09	2	1	3	0	0	0	0	0	0	1
Sample collection date February 17, 2005																									
A	19	10	2.50	4	3	0	3	0	1	7	4	2	0.50	0	0.00	3	1	4	0	0	0	0	0	0	0
B	31	18	2.57	9	6	0	3	0	2	10	7	4	0.57	1	0.14	3	1	4	0	0	0	0	0	0	1
C	28	16	3.20	9	5	0	2	0	2	9	5	4	0.80	0	0.00	4	1	5	0	0	0	0	0	0	0
D	28	15	2.50	6	6	0	3	0	2	9	6	3	0.50	0	0.00	3	2	5	0	0	0	0	0	0	1
E	37	17	1.70	8	6	0	3	0	2	16	10	6	0.60	2	0.20	6	2	8	0	0	0	0	0	0	2
Sample collection date March 9, 2006																									
A	33	13	1.30	7	2	0	4	0	3	15	10	6	0.60	3	0.30	5	2	7	0	0	0	0	0	0	1
B	30	14	1.17	6	4	0	4	0	1	14	12	7	0.58	3	0.25	2	1	3	0	0	0	0	0	0	0
C	28	15	1.67	7	3	0	5	0	2	10	9	5	0.56	2	0.22	1	1	2	0	0	0	0	0	0	0
D	30	15	1.88	8	3	0	4	0	2	11	8	5	0.63	2	0.25	3	1	4	0	0	0	0	0	0	0
E	28	13	1.44	7	4	0	2	0	2	12	9	4	0.44	2	0.22	3	1	4	0	0	0	0	0	0	0
Sample collection date March 21, 2007																									
A	17	12	12	4	4	0	4	0	3	1	1	0	0.00	1	1.00	0	1	1	0	0	0	0	0	0	0
B	27	15	2.14	8	3	0	4	0	2	9	7	4	0.57	1	0.14	2	1	3	0	0	0	0	0	0	0
C	26	14	3.5	6	3	0	5	0	3	7	4	2	0.50	0	0.00	3	2	5	0	0	0	0	0	0	1
D	31	16	1.78	7	3	0	6	0	2	12	9	4	0.44	1	0.11	3	1	4	0	0	0	0	0	0	0
E	22	13	6.5	6	4	0	3	0	0	4	2	2	1.00	0	0.00	2	4	6	1	0	0	0	0	0	2