

Appendix 1. Summary of Myxomycete Observations

Myxomycetes	Number of Dates of Observation			
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	New Hope Bottomlands	Grand Total
<i>Arcyria affinis</i>	1		3	4
<i>Arcyria cinerea</i>	2		5	7
<i>Arcyria denudata</i>	1		4	5
<i>Arcyria pomiformis</i>	1			1
<i>Calonema aureum</i>			1	1
<i>Ceratiomyxa fruticulosa</i>	2	1	3	6
<i>Clastoderma debaryanum</i>	1			1
<i>Collaria arcyrionema</i>	1			1
<i>Cribraria aurantiaca</i>	1			1
<i>Cribraria cancellata</i>	3		1	4
<i>Cribraria intricata</i>	1			1
<i>Cribraria microcarpa</i>	1			1
<i>Cribraria oregana</i>	1			1
<i>Cribraria piriformis</i>	1			1
<i>Cribraria species</i>	1			1
<i>Cribraria tenella</i>	1			1
<i>Diderma effusum</i>	2			2
<i>Echinostelium minutum</i>			1	1
<i>Fuligo septica</i>	2	2	2	6
<i>Hemitrichia calyculata</i>	2		5	7
<i>Hemitrichia clavata</i>		2		2
<i>Licea kleistobolus</i>	1			1
<i>Lycogala epidendrum</i>			2	2
<i>Lycogala exiguum</i>	1			1
<i>Macbrideola unidentified species</i>	1			1
<i>Metatrichia vesparia</i>	2		2	4
<i>Oligonema flavidum</i>	1		1	2
<i>Perichaena chryosperma</i>			1	1
<i>Perichaena corticalis</i>			1	1
<i>Physarum album</i>	3		3	6
<i>Physarum globuliferum</i>	4		3	7
<i>Physarum melleum</i>	1			1
<i>Physarum nucleatum</i>			2	2
<i>Physarum polycephalum</i>			2	2
<i>Physarum pulcherrimum</i>	2			2
<i>Physarum viride</i>	4		1	5

Myxomycetes	Number of Dates of Observation			
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	New Hope Bottomlands	Grand Total
<i>Reticularia splendens</i>			2	2
<i>Stemonaria longa</i>			1	1
<i>Stemonitis axifera</i>	2		4	6
<i>Stemonitis fusca</i>	2		3	5
<i>Stemonitis herbatica</i>	1			1
<i>Stemonitis pallida</i>	1			1
<i>Stemonitis smithii</i>	1		1	2
<i>Stemonitis splendens</i>			2	2
<i>Stemonitis virginensis</i>	1			1
<i>Stemonitopsis hyperopta</i>			1	1
<i>Stemonitopsis microspora</i>			1	1
<i>Stemonitopsis typhina</i>	1		6	7
<i>Trichia decipiens</i>			1	1
<i>Trichia favoginea</i>	1			1
<i>Trichia persimilis</i>	2		2	4
<i>Tubifera ferruginosa</i>	2			2

Appendix 2. Summary of Fungi Observations

Fungi Species	Number of Dates of Observation					Grand Total
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Duke Forest, Hollow Rock vicinity	
<i>Agaricus pocillator</i>	1					1
<i>Agaricus sylvicola</i>	1					1
<i>Allodus podophylli</i>	1					1
<i>Amanita bisporigera</i>	3			1		4
<i>Amanita carolinensis</i>				1		1
<i>Amanita ceciliae</i>	1					1
<i>Amanita citrina</i>	1					1
<i>Amanita crenulata</i>	1					1
<i>Amanita farinosa</i>	1		1	1		3
<i>Amanita flavoconia</i>				1		1
<i>Amanita flavorubescens</i>				1		1
<i>Amanita floridana</i>	1					1
<i>Amanita hygroskopica</i>	1					1
<i>Amanita jacksonii</i>	1					1
<i>Amanita muscaria</i>	1					1
<i>Amanita muscaria</i> var. <i>gessouwii</i>	1					1
<i>Amanita onusta</i>				1		1
<i>Amanita pelioma</i>	1					1
<i>Amanita polypyramis</i>	1			1		2
<i>Amanita unidentified species</i>	1					1
<i>Amanita vaginata</i>			1	1	1	3
<i>Annulohyphoxylon truncatum</i>			1	1		2
<i>Armillaria gallica</i>	1			1		2
<i>Ascocoryne cylichnium</i>				1		1
<i>Athelia scutellaris</i>				1		1
<i>Aulographum quercinum</i>		1				1
<i>Aureoboletus auriporus</i>	1					1
<i>Aureoboletus betula</i>	1					1
<i>Auricularia angiospermarum</i>	2		1	1		4
<i>Auricularia fuscusuccinea</i>			1			1
<i>Baeospora myosura</i>	1			1		2
<i>Baorangia bicolor</i>	1			1		2
<i>Biscogniauxia atropunctata</i>	1		1	2		4
<i>Biscogniauxia mediterranea</i>		1				1
<i>Bisporella citrina</i>	1			1		2
<i>Bjerkandera adusta</i>					1	1
<i>Boletinus merulioides</i>				1		1
<i>Boletus curtisii</i>				1		1
<i>Butyriboletus frostii</i>	1					1
<i>Byssomerulius incarnatus</i>	4					4
<i>Callistosporium luteo-olivaceum</i>	1					1
<i>Calocera cornea</i>	1		1			2
<i>Cantharellus cinnabarinus</i>					1	1
<i>Cantharellus lateritius</i>				1		1

Fungi	Number of Dates of Observation					
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Duke Forest, Hollow Rock vicinity	Grand Total
<i>Catinella nigro-olivacea</i>				1		1
<i>Cerrena unicolor</i>			1			1
<i>Chlorenchocelia versiformis</i>				1		1
<i>Chlorosplenium chlora</i>				1		1
<i>Clavulina coralloides</i>	1			1		2
<i>Collybia zonata</i>				2		2
<i>Collybiopsis bififormis</i>	2					2
<i>Collybiopsis ramealis</i>	1					1
<i>Coltricia montagnei</i>				1		1
<i>Coprinellus disseminatus</i>	1					1
<i>Craterellus fallax</i>	1					1
<i>Craterellus ignicolor</i>	1					1
<i>Crepidotus alabamensis</i>				1		1
<i>Crepidotus applanatus</i>				1		1
<i>Crepidotus crocophyllus</i>	1			1		2
<i>Crepidotus nephrodes</i>				1		1
<i>Cyathus striatus</i>	1					1
<i>Dacrymyces chrysospermus</i>			1			1
<i>Dacrymyces minor</i>			1			1
<i>Daedaleopsis confragosa</i>	3			2		5
<i>Daedaleopsis confragosa var. confragosa</i>	2					2
<i>Daldinia childiae</i>	1			1		2
<i>Daldinia concentrica</i>				1		1
<i>Desarmillaria tabescens</i>	1			1		2
<i>Diatrype disciformis</i>				1		1
<i>Echinoderma asperum</i>	1					1
<i>Elaphomyces granulatus</i>	1					1
<i>Entoloma abortivum</i>	1					1
<i>Entoloma rhodopolium</i>	1					1
<i>Epichloe typhina</i>				4		4
<i>Erysiphe penicillata</i>				1		1
<i>Exidia recisa</i>	1			1		2
<i>Exobasidium rhododendri</i>	1					1
<i>Exobasidium vaccinii</i>	1					1
<i>Fistulina hepatica</i>	1					1
<i>Ganoderma lobatum</i>			1			1
<i>Gastrum fimbriatum</i>	1					1
<i>Gastrum saccatum</i>					2	2
<i>Ginnsia viticola</i>				1		1
<i>Gymnopilus junonius</i>				2		2
<i>Gymnopilus penetrans</i>				1		1
<i>Gymnopus spongiosus</i>	1					1
<i>Gymnosporangium juniperi-virginianae</i>	1					1
<i>Gymnosporangium nidus-avis</i>	1					1
<i>Gyroporus castaneus</i>	1					1
<i>Hapalopilus rutilans</i>				1		1
<i>Helicogloea compressa</i>			1	1		2
<i>Hericium erinaceus</i>	1					1

Fungi	Number of Dates of Observation					Grand Total
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Duke Forest, Hollow Rock vicinity	
<i>Heterobasidion annosum</i>	2					2
<i>Hydnoporia corrugata</i>				1		1
<i>Hydnoporia olivacea</i>				2		2
<i>Hydnum repandum</i>	1					1
<i>Hygrocybe flavescens</i>				1		1
<i>Hygrophorus roseobrunneus</i>	1					1
<i>Hymenopellis furfuracea</i>	1			1		2
<i>Hymenopellis megalospora</i>				1		1
<i>Hypholoma fasciculare</i>	1					1
<i>Hypholoma lateritium</i>	1					1
<i>Hypholoma subviride</i>				1		1
<i>Hypocrea gelatinosa complex</i>				1		1
<i>Hypocreales species</i>			1			1
<i>Hypoxylon investiens</i>				1		1
<i>Inocybe fallax</i>				0		0
<i>Inocybe geophylla</i>	1					1
<i>Irpiciporus pachyodon</i>	1			1		2
<i>Kretzschmaria deusta</i>	1					1
<i>Laccaria striatula</i>				1		1
<i>Lacrymaria lacrymabunda</i>				1		1
<i>Lactarius gerardii</i>	1					1
<i>Lactarius indigo</i>				1		1
<i>Lactarius paradoxus</i>				1		1
<i>Lactarius piperatus</i>	1					1
<i>Lactarius plinthogalus</i>				1		1
<i>Lactarius subplinthogalus</i>				1		1
<i>Leccinellum crocipodium</i>				1		1
<i>Lentaria byssiseda</i>	1					1
<i>Lentinellus ursinus</i>	1			2		3
<i>Lentinus tigrinus</i>				3		3
<i>Lenzites betulinus</i>	1					1
<i>Lepiota cristata</i>	1					1
<i>Lepiota sanguiflua</i>	1					1
<i>Leucocoprinus fragilissimus</i>	1					1
<i>Lycoperdon perlatum</i>	4			1		5
<i>Lycoperdon pyriforme</i>	2					2
<i>Macrolepiota procera</i>	1					1
<i>Marasmiellus candidus</i>	2			1		3
<i>Marasmiellus praeacutus</i>	1					1
<i>Marasmius cohaerens</i>	1					1
<i>Marasmius delectans</i>	1					1
<i>Marasmius sullivantii</i>	1					1
<i>Meripilus sumstinei</i>				2		2
<i>Microglossum olivaceum</i>	1					1
<i>Mollisia ligni</i>	1			2		3
<i>Morchella diminutiva</i>				1		1
<i>Multifurca furcata</i>				1		1
<i>Mycena haematopus</i>	2			2		4

Fungi	Number of Dates of Observation					
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Duke Forest, Hollow Rock vicinity	Grand Total
<i>Mycena inclinata</i>	1					1
<i>Mycorrhaphium adustum</i>				3		3
<i>Naematelia aurantia</i>				1		1
<i>Nectriopsis rexiana</i>				1		1
<i>Neofavolus alveolaris</i>				1		1
<i>Panellus stipticus</i>	1			2		3
<i>Paragymnopus perforans</i>	1					1
<i>Phellinus gilvus</i>	1			1		2
<i>Phellodon fuligineoalbus</i>				1		1
<i>Phlebia tremellosa</i>	1		1	2		4
<i>Phlebiopsis crassa</i>			1	2		3
<i>Pholiota adiposa</i>				1		1
<i>Phylloporus leucomycelinus</i>				1		1
<i>Phylloporus rhodoxanthus</i>				1		1
<i>Phyllosticta minima</i>			1	1		2
<i>Picipes melanopus</i>				1		1
<i>Pleurotus ostreatus</i>	2		1		1	4
<i>Pluteus atromarginatus</i>				1		1
<i>Pluteus cervinus</i>	1			1	1	3
<i>Podoscypha petalodes</i>			1			1
<i>Polyporus squamosus</i>	0					0
<i>Poronidulus conchifer</i>	1		1	1		3
<i>Pseudocolus fusiformis</i>	1					1
<i>Puccinia arundinariae</i>				1		1
<i>Puccinia mariae-wilsoniae</i>	1					1
<i>Puccinia smilacis</i>				1		1
<i>Pycnoporellus fulgens</i>				1		1
<i>Ramaria concolor</i>	1					1
<i>Ramariopsis kunzei</i>	2					2
<i>Retiboletus retipes</i>				1		1
<i>Retiboletus vinaceipes</i>	1					1
<i>Rhizomarasmium pyrrocephalus</i>	1					1
<i>Rhodocollybia maculata</i>	1					1
<i>Russula (Macowanites) n.sp.</i>				1		1
<i>Russula aeruginea</i>				1		1
<i>Russula amoenolens</i>	1					1
<i>Russula aurata</i>				2		2
<i>Russula ballouii</i>	2					2
<i>Russula brevipes</i>	1					1
<i>Russula densifolia</i>				2		2
<i>Russula parvovirescens</i>	1				1	2
<i>Russula silvicola</i>	1					1
<i>Sarcoscypha occidentalis</i>	2					2
<i>Schizophyllum commune</i>	1		2	1		4
<i>Scleroderma areolatum</i>				1		1
<i>Scleroderma citrinum</i>				1		1
<i>Scleroderma polyrhizum</i>	1					1
<i>Scorias spongiosa</i>			1			1

Fungi Species	Number of Dates of Observation					Grand Total
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Duke Forest, Hollow Rock vicinity	
<i>Sebacina confusa</i>				1		1
<i>Sebacina pululahuana</i>				1		1
<i>Sebacina schweinitzii</i>	2					2
<i>Sphaerosporella brunnea</i>	1					1
<i>Sphaerotheca pannosa var. rosae</i>				1		1
<i>Steccherinum ochraceum</i>				1		1
<i>Stereum complicatum</i>	3					3
<i>Stereum fasciatum</i>	1			1		2
<i>Stereum hirsutum</i>	1			1		2
<i>Stereum ostrea</i>	2		1	1		4
<i>Stereum striatum</i>	1					1
<i>Stereum subtomentosum</i>	4					4
<i>Strobilomyces strobilaceus</i>	1					1
<i>Stropharia aeruginosa</i>	1					1
<i>Suillus hirtellus</i>	1					1
<i>Suillus subaureus</i>	1					1
<i>Tapinella atrotomentosa</i>	1					1
<i>Terana coerulea</i>	1			2		3
<i>Thyronectria aurigera</i>			1			1
<i>Toly pocladium capitatum</i>	1					1
<i>Trametes elegans</i>	1					1
<i>Trametes hirsuta</i>			1			1
<i>Trametes versicolor</i>	2		1	2	1	6
<i>Tremella fuciformis</i>				1		1
<i>Tremella mesenterica</i>	1		1			2
<i>Trichaptum bifforme</i>	1		1	2		4
<i>Trichoderma peltatum</i>				1		1
<i>Trichoderma sulphureum</i>			1	1		2
<i>Tricholoma (flavovirens) equestre</i>	1					1
<i>Tricholoma caligatum</i>	1					1
<i>Tylopilus balloui</i>	1					1
<i>Tyromyces chioneus</i>	1			1		2
<i>Urnula craterium</i>	1					1
<i>Vitreoporus dichrous</i>				1		1
<i>Volvariella bombycina</i>				1		1
<i>Xeromphalina campanella</i>				1		1
<i>Xylaria cubensis</i>			1			1
<i>Xylaria hypoxylon</i>			1			1
<i>Xylaria liquidambaris</i>			1			1
<i>Xylobolus frustulatus</i>	4		1	1		6
<i>Xylobolus subpileatus</i>				1		1
Grand Total	162	2	33	139	9	345

Appendix 3. Summary of Lichen Observations

Lichens Row Labels	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	New Hope Creek Farm
<i>Allographa striatula</i>		1			
<i>Amandinea polyspora</i>	1				
<i>Anisomeridium biforme</i>	1				
<i>Anisomeridium polypori</i>				1	
<i>Arthonia quintaria</i>	1	2			
<i>Arthonia rubella</i>	3	2		1	
<i>Arthonia susa</i>	1	1	1	1	
<i>Arthopyrenia fallaciosa</i>	2				
<i>Arthothelium spectabile</i>	1				
<i>Aspicilia laevata</i>	1				
<i>Bacidia purpurans</i>		1			
<i>Bacidia schweinitzii</i>		2	1		
<i>Bacidia suffusa</i>	1	4		1	
<i>Bacidina delicata</i>		1			
<i>Baculifera curtisii</i>		1	1	1	
<i>Biatora printzenii</i>		2			
<i>Buellia erubescens</i>	1	2			
<i>Calicium salicinum</i>		1			
<i>Caloplaca cerina</i>	1	1			
<i>Candelaria concolor</i>		1			
<i>Candelaria fibrosa</i>	1				
<i>Candelariella xanthostigmoides</i>		2	1		
<i>Canoparmelia caroliniana</i>	1		1		
<i>Chrysothrix caesia</i>	1	1			
<i>Chrysothrix xanthina</i>	1	1		1	
<i>Cladonia caespiticia</i>	2				
<i>Cladonia ochrochlora</i>			1	1	
<i>Cladonia petrophila</i>	1				
<i>Cladonia peziziformis</i>	1			1	
<i>Cladonia ravenelii</i>				1	
<i>Cladonia subtenuis</i>	1				
<i>Coccocarpia palmicola</i>	2				
<i>Constrictolumina cinchonae</i>		1			
<i>Flavoparmelia caperata</i>	2	2		1	
<i>Graphis lineola</i>		1			
<i>Graphis scripta</i>	1	4	1	1	
<i>Gyalideopsis buckii</i>				1	

Lichens	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	New Hope Creek Farm
<i>Gyalolechia flavovirescens</i>	1				
<i>Heterodermia albicans</i>		1			
<i>Hyperphyscia syncolla</i>		1			
<i>Hypotrachyna livida</i>	1	1	1	1	
<i>Ionaspis alba</i>	1				
<i>Lecanora hybocarpa</i>	1	2	1		
<i>Lecanora protervula</i>	1		1	1	
<i>Lecanora strobilina</i>			1		
<i>Lepra ophthalmiza</i>		1	1		
<i>Lepra pustulata</i>				1	
<i>Lepraria finkii</i>	1	1	1		
<i>Leptogium cyanescens</i>	1		1	1	
<i>Leptogium hirsutum</i>	1				
<i>Lichenothelia</i>	1				
<i>Maronea polyphaea</i>				1	
<i>Melaspilea demissa</i>			1		
<i>Micarea neostipitata</i>				1	
<i>Multiclavula mucida</i>					1
<i>Myelochroa aurulenta</i>	2	2			
<i>Nadvornikia sorediata</i>	1	2	1	1	
<i>Ochrolechia africana</i>				1	
<i>Opegrapha vulgata</i>	1				
<i>Parmotrema hypoleucinum</i>	1	3	1		
<i>Parmotrema hypotropum</i>		1	2	1	
<i>Parmotrema perforatum</i>			1		
<i>Parmotrema reticulatum</i>	1	3	1	1	
<i>Parmotrema submarginale</i>	2	2	1	1	
<i>Pertusaria epixantha</i>	1	1	2	1	
<i>Pertusaria paratuberculifera</i>	1		1		
<i>Pertusaria texana</i>	1	1			
<i>Pertusaria xanthodes</i>			1		
<i>Phaeocalicium polyporaeum</i>		1			
<i>Phaeographis inusta</i>	1	1		1	
<i>Phaeophyscia adiastrata</i>	1				
<i>Phaeophyscia hispidula</i>	2				
<i>Phaeophyscia pusilloides</i>		1			
<i>Phaeophyscia rubropulchra</i>		4		1	
<i>Phlyctis boliviensis</i>		1	1		
<i>Phlyctis petraea</i>	1				
<i>Phyllopsora isidiosa</i>	1		1		

Lichens	Number of Dates of Observation				
Row Labels	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	New Hope Creek Farm
<i>Phyllopsora kalbii</i>		1			
<i>Physcia americana</i>		1			
<i>Physcia millegrana</i>		1			
<i>Physcia pumilior</i>	1	3	1	1	
<i>Porina heterospora</i>	1	2			
<i>Porpidia albocaerulescens</i>	1				
<i>Pseudosagedia cestrensis</i>		3	1	1	
<i>Punctelia caseana</i>		1			
<i>Punctelia rudenta</i>		2	1	1	
<i>Pyrenula leucostoma</i>	1				
<i>Pyrenula pseudobufonia</i>		1	1		
<i>Pyrenula punctella</i>		1	1	1	
<i>Pyrenula subelliptica</i>		1			
<i>Pyxine subcinerea</i>		3			
<i>Ramalina culbersoniorum</i>		3	1		
<i>Rinodina maculans</i>		3		1	
<i>Scytinium lichenoides</i>	1				
<i>Sticta carolinensis</i>	1				
<i>Thelopsis corticola</i>		1	1	1	
<i>Thelotrema subtile</i>	1	1	1		
<i>Trapeliopsis flexuosa</i>		1		1	
<i>Traponora varians</i>	2	3	1	1	
<i>Usnea mutabilis</i>	1				
<i>Usnea strigosa</i>	1	3	1	1	
<i>Viridothelium virens</i>		1	1		
<i>Zwackhia viridis</i>	1				
Grand Total	66	100	39	35	1

Appendix 4. Summary of Bryophyte Observations

Bryophytes	Number of Dates of Observation			
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands
HORNWORTS				
<i>Phaeoceros carolinianus</i>	2			
LIVERWORTS				
<i>Calypogeia neogaea</i>	2		1	1
<i>Cephaloziella divaricata</i>				1
<i>Cheilolejeunea clypeata</i>	4	3	2	2
<i>Cheilolejeunea uncinata</i>	1	1		1
<i>Cololejeunea biddlecomiae</i>	3	3	3	
<i>Frullania brittoniae</i>				1
<i>Frullania ericoides</i>	3	4	2	
<i>Frullania inflata</i>		2	1	1
<i>Frullania unidentified species</i>	4	17	3	7
<i>Fuscocephaloziopsis catenulata</i>	3	2		1
<i>Lophocolea heterophylla</i>	2	2	1	2
<i>Nowellia curvifolia</i>	4	2		1
<i>Odontoschisma denudatum</i>	4			1
<i>Plagiochila porelloides</i>	1			
<i>Porella pinnata</i>	1	3	2	1
<i>Porella platyphylla</i>	2	4	1	1
<i>Radula australis</i>	2	2	1	
<i>Scapania nemorea</i>	1			
<i>Solenostoma fossombronioides</i>	1			
Total Liverworts	38	45	17	21
MOSESSES				
<i>Amblystegium serpens</i>	1			
<i>Anomodon minor</i>	1	3	2	1
<i>Anomodon tristis</i>	3	3	1	
<i>Arrhenopterum heterostichum</i>			2	
<i>Atrichum angustatum</i>	2		2	1
<i>Atrichum crispulum</i>	2	4	1	1
<i>Brachelyma subulatum</i>			1	
<i>Brachythecium acuminatum</i>	1		1	
<i>Brachythecium laetum</i>	2	2		2
<i>Brachythecium unidentified species</i>	1			
<i>Bryoandersonia illecebra</i>	3	3	1	
<i>Bryum klinggraeffii</i>				1
<i>Bryum unidentified species</i>				1

Bryophytes	Number of Dates of Observation			
Species	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands
<i>Callicladium haldanianum</i>	1			
<i>Calliergonella curvifolia</i>	1	1	1	1
<i>Calliergonella lindbergii</i>	1	2	1	1
<i>Campyliadelphus chrysophyllus</i>	1	2	2	
<i>Claopodium rostratum</i>	2	1	1	
<i>Clasmatodon parvulus</i>	5	11	6	5
<i>Climacium americanum</i>	1	2	1	1
<i>Cryphaea glomerata</i>	2	3	1	1
<i>Ctenidium molluscum</i>	3	1	1	
<i>Dicranella heteromalla</i>	1			
<i>Dicranum flagellare</i>	1		1	
<i>Dicranum montanum</i>	1			
<i>Dicranum scoparium</i>	2		2	
<i>Ditrichum pallidum</i>	1	1	1	1
<i>Drummondia prorepens</i>		1		
<i>Entodon cladorrhizans</i>	3	4	1	1
<i>Entodon seductrix</i>		1		1
<i>Fissidens bryoides</i>	2			
<i>Fissidens bushii</i>		2		
<i>Fissidens dubius</i>				2
<i>Fissidens fontanus</i>				1
<i>Fissidens subbasilaris</i>	2			
<i>Fissidens taxifolius</i>	2	1		1
<i>Fontinalis unidentified species</i>				1
<i>Forsstroemia trichomitria</i>	4	6	2	2
<i>Funaria flavicans</i>				1
<i>Grimmia pilifera</i>	2			
<i>Haplocladium microphyllum</i>	1	7	2	3
<i>Hedwigia ciliata</i>	1			
<i>Homalotheciella subcapillata</i>	2	2	3	
<i>Homomallium adnatum</i>	1			
<i>Hygroamblystegium varium var. humile</i>		1		2
<i>Hygroamblystegium varium var. varium</i>	3	4	3	4
<i>Hypnum fauriei</i>	1			
<i>Isopterygium tenerum</i>	1	1	1	2
<i>Leptodictyum riparium</i>			2	1
<i>Leskea gracilescens</i>		6		1
<i>Leskea obscura</i>		1		1
<i>Leucobryum albidum</i>	2	1		1
<i>Leucobryum glaucum</i>	2		2	1

Bryophytes	Number of Dates of Observation			
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands
<i>Orthotrichum pusillum</i>	1	3		
<i>Orthotrichum unidentified species</i>		1		1
<i>Oxyrrhynchium hians</i>	3	3	2	1
<i>Physcomitrium pyriforme</i>				1
<i>Plagiomnium ciliare</i>	1	3	1	1
<i>Plagiomnium cuspidatum</i>	1	3	1	1
<i>Platygyrium repens</i>	3	4	2	2
<i>Polytrichastrum ohioense</i>	1	1	3	
<i>Pseudanomodon attenuatus</i>	2	3	2	2
<i>Pterogoniadelphus julaceus</i>	2	5	1	
<i>Ptychomitrium drummondii</i>	2	1		
<i>Ptychomitrium incurvum</i>	1			
<i>Pylaisiadelpha tenuirostris</i>	3	1	3	1
<i>Rhynchostegium serrulatum</i>	3	3	2	
<i>Schwetschkeopsis fabronia</i>	1	2	1	
<i>Sematophyllum adnatum</i>	3	2	2	1
<i>Sphagnum missouricum</i>			1	
<i>Taxiphyllum alternans</i>		2		
<i>Taxiphyllum taxirameum</i>	1			
<i>Thelia asprella</i>			1	
<i>Thelia hirtella</i>		1		1
<i>Thuidium delicatulum</i>	2	3	1	2
<i>Tortella humilis</i>	1			
<i>Warnstorfia fluitans</i>		1		
<i>Weissia controversa</i>	1			
Total Mosses	100	119	68	57
Grand Total	140	164	85	78

Appendix 5. Summary of Vascular Plant Observations

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Acalypha rhomboidea</i>				1	
<i>Acer floridanum</i>	6	1		4	1
<i>Acer negundo</i>	4	2		3	1
<i>Acer rubrum</i>	3	1		4	1
<i>Aconitum uncinatum</i>					1
<i>Adiantum pedatum</i>					1
<i>Aesculus sylvatica</i>	5	2		4	1
<i>Agalinis purpurea</i>	1				
<i>Agrimonia unidentified species</i>	1				
<i>Agrostis perennans</i>				1	
<i>Ailanthus altissima</i>	1				
<i>Ajuga reptans</i>				1	
<i>Albizia julibrissin</i>	3				
<i>Alisma subcordatum</i>		1			
<i>Allium canadense</i>				1	
<i>Allium vineale</i>	1				
<i>Amauropelta noveboracensis</i>				2	
<i>Amelanchier arborea</i>	1				1
<i>Amphicarpaea bracteata</i>	1			2	
<i>Amsonia tabernaemontana</i>				2	1
<i>Anchistea virginica</i>				1	
<i>Andersonglossum virginianum</i>	3				1
<i>Antennaria unidentified species</i>	1				
<i>Apios americana</i>				2	
<i>Aplectrum hyemale</i>					1
<i>Apocynum cannabinum</i>				1	
<i>Aralia spinosa</i>				1	
<i>Arisaema dracontium</i>	2			2	1
<i>Arisaema triphyllum</i>	3			2	1
<i>Arisaema unidentified species</i>				1	
<i>Artemisia vulgaris</i>	1				
<i>Arundinaria gigantea</i>				2	
<i>Asarum reflexum</i>		1		4	1
<i>Asclepias incarnata</i>		1			
<i>Asclepias syriaca</i>	1			2	

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Asimina parviflora</i>				1	
<i>Asimina triloba</i>	4	2		6	1
<i>Asplenium platyneuron</i>	1			1	1
<i>Athyrium asplenioides</i>				1	1
<i>Baccharis halimifolia</i>	1				
<i>Berberis thunbergii</i>				1	
<i>Betula nigra</i>	2			2	1
<i>Bidens aristosa</i>	1			1	
<i>Bidens bipinnata</i>	1				
<i>Bidens frondosa</i>	1				
<i>Bignonia capreolata</i>		1		2	1
<i>Boehmeria cylindrica</i>	1	2		3	
<i>Botrypus virginianus</i>	1				1
<i>Bromus secalinus</i>				1	
<i>Callitriche heterophylla</i>				1	
<i>Calycanthus floridus</i>				1	
<i>Campsis radicans</i>	1			1	
<i>Cardamine angustata</i>				1	1
<i>Cardamine concatenata</i>		1		1	1
<i>Cardamine hirsuta</i>	1				
<i>Carex amphibola</i>				1	
<i>Carex blanda</i>				1	
<i>Carex caroliniana</i>				2	
<i>Carex crinita</i>		1		2	
<i>Carex debilis</i>				1	
<i>Carex flaccosperma</i>				1	
<i>Carex frankii</i>	1				
<i>Carex gigantea</i>				1	
<i>Carex gracillima</i>				1	
<i>Carex grayi</i>				1	
<i>Carex grisea</i>				1	
<i>Carex intumescens</i>				1	
<i>Carex louisianica</i>				1	
<i>Carex lupulina</i>				2	
<i>Carex lurida</i>				3	
<i>Carex pigra</i>				1	
<i>Carex radiata</i>				1	
<i>Carex rosea</i>				1	

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Carex squarrosa</i>				2	
<i>Carex stipata</i>				1	
<i>Carex tribuloides</i>				1	
<i>Carex typhina</i>				1	
<i>Carex vulpinoidea</i>				1	
<i>Carpinus caroliniana</i>	4	2		3	1
<i>Carya carolinae-septentrionalis</i>	2				
<i>Carya cordiformis</i>	1			3	
<i>Carya glabra</i>	2				
<i>Carya laciniosa</i>		1		4	
<i>Carya ovata</i>	4	1		2	1
<i>Carya tomentosa</i>	4			3	
<i>Celastrus unidentified species</i>	1				
<i>Celtis laevigata</i>	4	1		2	1
<i>Celtis laevigata-smallii</i>	1				
<i>Cephalanthus occidentalis</i>				1	
<i>Cercis canadensis</i>	3			2	1
<i>Chaerophyllum procumbens</i>				1	
<i>Chaerophyllum tainturieri</i>				1	
<i>Chamaecrista fasciculata</i>	1			1	
<i>Chamaelirium luteum</i>					1
<i>Chasmanthium latifolium</i>	3	2		2	1
<i>Chelone glabra</i>				1	
<i>Chimaphila maculata</i>					1
<i>Chionanthus virginicus</i>	3				
<i>Chrysogonum virginianum</i>	1			1	1
<i>Chrysopsis mariana</i>	1				
<i>Cicuta maculata</i>	1			1	1
<i>Cinna arundinacea</i>				2	
<i>Cirsium vulgare</i>	1				
<i>Claytonia virginica</i>	6			3	1
<i>Clematis terniflora</i>				2	
<i>Clematis viorna</i>					1
<i>Clematis virginiana</i>				2	1
<i>Coleataenia anceps</i>				1	
<i>Commelina communis</i>	1				
<i>Commelina diffusa</i>				1	
<i>Commelina virginica</i>				1	

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Conoclinium coelestinum</i>	1				
<i>Cornus florida</i> (= <i>Benthamidia florida</i>)	5			3	1
<i>Corydalis flavula</i>				1	1
<i>Corylus americana</i>				1	
<i>Cryptotaenia canadensis</i>				2	
<i>Cunila origanoides</i>	1				
<i>Cyclosporum leptophyllum</i>				1	
<i>Cynodon dactylon</i>				1	
<i>Cyperus lancastrisensis</i>				1	
<i>Cyperus strigosus</i>				1	
<i>Cypripedium parviflorum</i> var. <i>pubescens</i>				1	
<i>Daucus carota</i>	1				
<i>Desmodium canescens</i>	1				
<i>Desmodium paniculatum</i>	1			1	
<i>Desmodium perplexum</i>	1				
<i>Desmodium viridiflorum</i>	1				
<i>Dicentra cucullaria</i>	1				
<i>Dichanthelium acuminatum</i> var. <i>acuminatum</i>				1	
<i>Dichanthelium clandestinum</i>				2	
<i>Dichanthelium commutatum</i> subsp. <i>commutatum</i>	1				
<i>Dichanthelium dichotomum</i> var. <i>dichotomum</i>				1	
<i>Dichanthelium scoparium</i>				1	
<i>Digitaria sanguinalis</i>				1	
<i>Diodia virginiana</i>	1			1	
<i>Dioscorea polystachya</i>	2			3	1
<i>Dioscorea villosa</i>	3			1	1
<i>Diospyros virginiana</i>	3	1			
<i>Diphasiastrum digitatum</i>					1
<i>Echinochloa unidentified species</i>				1	
<i>Elaeagnus pungens</i>	1				
<i>Elaeagnus umbellata</i>	2			1	
<i>Elaeagnus unidentified species</i>				1	
<i>Elephantopus carolinianus</i>	1			1	
<i>Elephantopus tomentosus</i>	1				
<i>Elymus hystrix</i>	3			1	
<i>Elymus unidentified species</i>				1	
<i>Endodeca serpentaria</i>	1			3	
<i>Enemion biternatum</i>					1

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Equisetum hyemale ssp. affine</i>					1
<i>Erechtites hieraciifolia</i>	1				
<i>Erigeron annuus</i>	1				
<i>Erigeron canadensis</i>				1	
<i>Erigeron philadelphicus</i>				1	
<i>Erigeron philadelphicus var. philadelphicus</i>				1	
<i>Erigeron strigosus</i>				1	
<i>Erythronium americanum</i>		1		4	1
<i>Erythronium umbilicatum</i>	7			1	1
<i>Erythronium unidentified species</i>				1	
<i>Euonymus americanus</i>	2			2	1
<i>Euonymus fortunei</i>				2	
<i>Eupatorium capillifolium</i>	1			1	
<i>Eupatorium godfreyanum</i>	1				
<i>Eupatorium hyssopifolium</i>				1	
<i>Eupatorium pubescens</i>				2	
<i>Eupatorium serotinum</i>				1	
<i>Euphorbia obtusata</i>				2	
<i>Euphorbia pubentissima</i>				1	
<i>Eurybia divaricata</i>	1				1
<i>Fagus grandifolia</i>	5			3	1
<i>Festuca subverticillata</i>				1	
<i>Ficaria verna</i>				1	
<i>Fraxinus americana</i>	2			1	
<i>Fraxinus biltmoreana</i>	1			1	
<i>Fraxinus pennsylvanica</i>	2	2		3	1
<i>Galium aparine</i>				1	
<i>Galium circaezans</i>	1			1	
<i>Galium obtusum</i>				3	
<i>Galium obtusum var. filifolium</i>				2	1
<i>Galium triflorum</i>				1	
<i>Galium uniflorum</i>	1				
<i>Gamochaeta purpurea</i>				1	
<i>Geranium maculatum</i>		1			1
<i>Geum canadense</i>				2	1
<i>Geum virginianum</i>					1
<i>Glechoma hederacea</i>	2			1	
<i>Glyceria septentrionalis</i>				1	

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Glyceria striata</i>				1	
<i>Gonolobus suberosus</i>	2			1	
<i>Goodyera pubescens</i>				1	1
<i>Gratiola virginiana</i>				1	
<i>Hamamelis virginiana</i>					1
<i>Hedera helix</i>				1	
<i>Hemerocallis unidentified species</i>	1				
<i>Hepatica americana</i>	4				1
<i>Heuchera americana</i>					1
<i>Hexastylis arifolia</i>	5			1	1
<i>Hexastylis lewisii</i>	3				
<i>Hieracium gronovii</i>	1				
<i>Hieracium venosum</i>	1				
<i>Houstonia caerulea</i>	1			1	1
<i>Houstonia purpurea</i>	1				
<i>Houstonia pusilla</i>					1
<i>Houstonia tenuifolia</i>				1	
<i>Humulus japonicus</i>	1				
<i>Huperzia lucidula</i>					1
<i>Hydrolea quadrivalvis</i>				1	
<i>Hylodesmum nudiflorum</i>	1				
<i>Hypericum hypericoides</i>	1			1	1
<i>Hypericum mutilum</i>				1	
<i>Hypericum nudiflorum</i>				1	
<i>Hypericum punctatum</i>				1	
<i>Hypochaeris radicata</i>				1	
<i>Hypopitys species 3</i>	1				
<i>Hypoxis hirsuta</i>					1
<i>Ilex cornuta</i>	1			1	
<i>Ilex decidua</i>	1			3	1
<i>Ilex opaca</i>				2	
<i>Impatiens capensis</i>	3	1		3	1
<i>Ipomoea coccinea</i>	1				
<i>Ipomoea lacunosa</i>				1	
<i>Iris cristata</i>	1				1
<i>Iris pseudacorus</i>				3	
<i>Juglans nigra</i>	2	1		1	
<i>Juncus coriaceus</i>				1	

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Juncus effusus</i>				1	
<i>Juncus tenuis</i>				1	
<i>Juniperus virginiana</i>	3	1		1	
<i>Kummerowia stipulacea</i>				1	
<i>Lactuca canadensis</i>				1	
<i>Lactuca floridana</i>	1				
<i>Lactuca unidentified species</i>				1	
<i>Lamium amplexicaule</i>	1				1
<i>Lamium purpureum</i>	2				
<i>Laportea canadensis</i>	1			2	
<i>Leersia virginica</i>				1	
<i>Lepidium virginicum</i>				1	
<i>Lespedeza bicolor</i>				1	
<i>Lespedeza cuneata</i>				1	
<i>Lespedeza procumbens</i>				1	
<i>Lespedeza violacea</i>	1				
<i>Lespedeza virginica</i>				1	
<i>Leucanthemum vulgare</i>				1	
<i>Ligustrum japonicum</i>	1	1		1	
<i>Ligustrum sinense</i>	3			2	1
<i>Lindera benzoin</i>	4	2		1	1
<i>Lindernia dubia</i>				1	
<i>Liquidambar styraciflua</i>	6	1		2	1
<i>Liriodendron tulipifera</i>	5			2	1
<i>Liriope unidentified species</i>				2	
<i>Lobelia cardinalis</i>				2	
<i>Lobelia inflata</i>				1	
<i>Lobelia puberula</i>	1			1	
<i>Lobelia siphilitica</i>				1	
<i>Lobelia spicata</i>				1	
<i>Lonicera japonica</i>	3			2	1
<i>Lonicera maackii</i>	1				
<i>Lonicera sempervirens</i>	2				1
<i>Lorinseria areolata</i>				1	1
<i>Ludwigia alternifolia</i>				1	
<i>Ludwigia glandulosa</i>				1	
<i>Ludwigia palustris</i>				1	
<i>Luzula acuminata</i>					1

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Lycopus virginicus</i>				1	
<i>Lythrum salicaria</i>				1	
<i>Mahonia bealei</i>	1				
<i>Maianthemum racemosum</i>	4				1
<i>Matelea carolinensis</i>				1	
<i>Melothria pendula</i>				1	
<i>Menispermum canadense</i>		1		2	
<i>Micranthes virginensis</i>	1				1
<i>Microstegium vimineum</i>	5	2		3	1
<i>Mikania scandens</i>	1			1	
<i>Mimulus alatus</i>				1	
<i>Mitchella repens</i>	2			1	1
<i>Monotropa uniflora</i>	1				
<i>Morella cerifera</i>				1	
<i>Morus rubra</i>	2	1		4	1
<i>Murdannia keisak</i>				1	
<i>Muscadinia rotundifolia</i>	2			2	
<i>Myosotis macrosperma</i>				1	
<i>Nabalus unidentified species</i>	1				
<i>Nanopanax trifolius</i>					1
<i>Nyssa sylvatica</i>	2			1	
<i>Oenothera fruticosa</i>				1	
<i>Oenothera speciosa</i>	1				
<i>Onoclea sensibilis</i>				3	1
<i>Ophioglossum pycnostichum</i>	2			1	1
<i>Osmunda regalis var. spectabilis</i>				1	
<i>Osmunda spectabilis</i>				1	
<i>Ostrya virginiana</i>	5				1
<i>Oxalis colorea</i>				1	
<i>Oxalis unidentified species</i>				1	
<i>Oxalis violacea</i>	2			1	1
<i>Oxydendrum arboreum</i>	2			2	
<i>Packera anonyma</i>					1
<i>Packera aurea</i>					1
<i>Parthenocissus quinquefolia</i>	4	1		2	1
<i>Paspalum dilatatum</i>				1	
<i>Paspalum notatum</i>				1	
<i>Passiflora lutea</i>				1	

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Paulownia tomentosa</i>				1	
<i>Peltandra virginica</i>				1	1
<i>Penthorum sedoides</i>				1	
<i>Perilla frutescens</i>				1	
<i>Persicaria densiflora</i>				1	
<i>Persicaria hydropiperoides</i>	1			1	
<i>Persicaria longiseta</i>				1	
<i>Persicaria maculosa</i>	1			1	
<i>Persicaria pensylvanica</i>				1	
<i>Persicaria punctata</i>				1	
<i>Persicaria sagittata</i>	1			1	
<i>Persicaria virginiana</i>	1			2	
<i>Phegopteris hexagonoptera</i>				2	
<i>Phlox nivalis</i>					1
<i>Phyllanthus caroliniensis</i>				1	
<i>Phytolacca americana</i>	1			1	
<i>Pilea pumila</i>				1	
<i>Pinus echinata</i>	2			1	
<i>Pinus taeda</i>	3	1		1	1
<i>Pinus virginiana</i>	1				
<i>Plantago virginica</i>				1	
<i>Platanthera flava</i>				1	
<i>Platanus occidentalis</i>	3	1		3	1
<i>Pleopeltis michauxiana</i>				1	
<i>Pluchea camphorata</i>				1	
<i>Poa cuspidata</i>					1
<i>Podophyllum peltatum</i>	3			1	1
<i>Polygala senega</i>					1
<i>Polygonatum biflorum</i>	2				1
<i>Polypodium virginianum</i>					1
<i>Polystichum acrostichoides</i>	2			1	1
<i>Pontederia cordata</i>				1	
<i>Populus deltoides</i>				2	
<i>Proserpinaca palustris</i>				1	
<i>Prunella vulgaris</i>					1
<i>Prunus angustifolia</i>					1
<i>Prunus serotina</i>	1				
<i>Pycnanthemum tenuifolium</i>				1	

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Pyrrhopappus carolinianus</i>				1	
<i>Quercus alba</i>	4				
<i>Quercus coccinea</i>	1				
<i>Quercus falcata</i>	2				
<i>Quercus lyrata</i>		2		5	1
<i>Quercus marilandica</i>	1				
<i>Quercus michauxii</i>		1		3	1
<i>Quercus nigra</i>				1	
<i>Quercus pagoda</i>	1			2	1
<i>Quercus phellos</i>	2	1		3	
<i>Quercus rubra</i>	1			1	1
<i>Quercus shumardii</i>	4			2	
<i>Quercus stellata</i>	2				
<i>Quercus velutina</i>	2				1
<i>Ranunculus abortivus</i>				1	1
<i>Ranunculus hispidus</i>					1
<i>Ranunculus parviflorus</i>					1
<i>Rhexia mariana</i>				2	
<i>Rhododendron periclymenoides</i>	1			1	1
<i>Rhus copallinum</i>				1	
<i>Rhus glabra</i>				1	
<i>Rhynchospora corniculata</i>				2	
<i>Rosa multiflora</i>	4				
<i>Rosa palustris</i>				1	
<i>Rubus flagellaris</i>	1				
<i>Rubus pensilvanicus</i>	1			1	
<i>Rudbeckia laciniata</i>	1				
<i>Ruellia caroliniensis</i>			1	3	
<i>Rumex conglomeratus</i>				1	
<i>Rumex crispus</i>				1	
<i>Sagittaria latifolia</i>		1			
<i>Salix nigra</i>				1	
<i>Salvia lyrata</i>				1	1
<i>Sambucus canadensis</i>	1	1		3	
<i>Samolus parviflorus</i>				1	
<i>Sanguinaria canadensis</i>	1				
<i>Sanicula canadensis</i>	1			1	
<i>Sanicula odorata</i>				1	

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Saururus cernuus</i>	2	3		4	1
<i>Sceptridium biternatum</i>				1	
<i>Sceptridium dissectum</i>				1	
<i>Sceptridium unidentified species</i>	1				
<i>Scirpus cyperinus</i>				1	
<i>Scirpus georgianus</i>				2	
<i>Scutellaria elliptica</i> var. <i>elliptica</i>	1				
<i>Scutellaria integrifolia</i>	1			3	
<i>Scutellaria lateriflora</i>				2	
<i>Sedum ternatum</i>				1	
<i>Senna marilandica</i>				1	
<i>Senna unidentified species</i>				1	
<i>Sida rhombifolia</i>				1	
<i>Silphium asteriscus</i>				1	
<i>Sisyrinchium angustifolium</i>					1
<i>Smallanthus uvedalia</i>	1				
<i>Smilax bona-nox</i>	1			1	
<i>Smilax glauca</i>				1	
<i>Smilax hispida</i>				3	
<i>Smilax rotundifolia</i>	1			2	
<i>Smilax smallii</i>				1	
<i>Solanum carolinense</i>				1	
<i>Solidago altissima</i>	1			2	
<i>Solidago bicolor</i>	1				
<i>Solidago caesia</i>	1				
<i>Solidago gigantea</i>				2	
<i>Solidago nemoralis</i>	1				
<i>Solidago rugosa</i>	1			1	
<i>Solidago rugosa</i> var. <i>aspera</i>				1	
<i>Sparganium americanum</i>				4	
<i>Spiraea thunbergii</i>				1	
<i>Spirodela polyrhiza</i>	1				
<i>Staphylea trifolia</i>	1			3	1
<i>Steironema ciliatum</i>					1
<i>Stellaria media</i>	2			1	1
<i>Stellaria pubera</i>	2				1
<i>Styrax grandifolius</i>	1				1
<i>Symphyotrichum dumosum</i>	1				

Vascular Plants	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Symphyotrichum lateriflorum</i>	1			1	
<i>Thalia dealbata</i>				2	1
<i>Thalictrum thalictroides</i>	3			2	1
<i>Thaspium barbinode</i>					1
<i>Thyrsanthella difformis</i>	1			1	
<i>Tiarella cordifolia</i>					1
<i>Tipularia discolor</i>	2			1	1
<i>Toxicodendron radicans</i>	1			3	1
<i>Trepocarpus aethusae</i>				7	
<i>Trifolium pratense</i>	1				
<i>Trifolium repens</i>	1			1	
<i>Typha latifolia</i>				1	
<i>Ulmus alata</i>	1			2	1
<i>Ulmus americana</i>	1	1		2	1
<i>Ulmus rubra</i>	3				
<i>Uvularia perfoliata</i>					1
<i>Uvularia sessilifolia</i>					1
<i>Vaccinium arboreum</i>				1	
<i>Vaccinium formosum</i>				1	1
<i>Vaccinium fuscatum</i>	1			1	
<i>Vaccinium pallidum</i>	1				
<i>Vaccinium stamineum</i>	1				
<i>Vaccinium tenellum</i>	1				
<i>Valerianella radiata</i>	1				
<i>Verbena brasiliensis</i>				1	
<i>Verbesina alternifolia</i>	2	1		2	
<i>Verbesina occidentalis</i>	1				
<i>Vernonia noveboracensis</i>				1	
<i>Veronica peregrina</i>				1	
<i>Veronica persica</i>	2				
<i>Veronica serpyllifolia</i>	1				
<i>Viburnum acerifolium</i>	1			1	1
<i>Viburnum dentatum</i>					1
<i>Viburnum prunifolium</i>	1			3	1
<i>Viburnum rafinesqueanum</i>	2			3	1
<i>Vicia caroliniana</i>					1
<i>Vinca minor</i>	2				
<i>Viola affinis</i>				1	1

Vascular Plants	Number of Dates of Observation				
Species	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Viola eriocarpa</i>		1		4	1
<i>Viola palmata</i>				1	1
<i>Viola pubescens</i>				1	
<i>Viola sororia</i>				2	1
<i>Viola unidentified species</i>	1	1			
<i>Vitis aestivalis</i>				1	
<i>Vitis baileyana</i>				1	
<i>Vitis unidentified species</i>	1				
<i>Youngia japonica</i>				2	
<i>Zephyranthes atamasco</i>				2	1
<i>Zizia aurea</i>					1
Grand Total	371	55	1	490	136

Appendix 6. Summary of Arachnid Observations

Arachnids	Number of Dates of Observation			
	Hollow Rock Nature Park	Hollow Rock Nature Park	Mt. Moriah Bottomlands	New Hope Bottomlands
PSEUDOSCORPIONS				
<i>Ephippiochthonius tetrachelatus</i>	1			
<i>Kleptochthonius multispinosus</i>	1			
<i>Microbisium parvulum</i>	1			
<i>Tuberocreagris lata</i>	1			
HARVESTMEN				
<i>Erebomaster acanthinus</i>	1			
<i>Hadrobunus maculosus</i>				1
<i>Leiobunum euserratipalpe</i>				1
<i>Leiobunum flavum</i>				1
<i>Leiobunum formosum</i>	1			
<i>Leiobunum vittatum</i>	1		1	1
<i>Vonones sayi</i>				1
MITES				
<i>Aceria campestricola</i>				1
<i>Aceria fraxini</i>				1
<i>Eriophyes nyssae</i>				1
<i>Vasates aceriscrumena</i>				1
SPIDERS				
<i>Agelenopsis pennsylvanica</i>	1			1
<i>Agyneta angulata</i>				1
<i>Agyneta micaria</i>			1	1
<i>Agyneta parva</i>				1
<i>Allocosa funerea</i>				1
<i>Anthrobia acuminata</i>				1
<i>Anyphaena pectorosa</i>	1			1
<i>Araneus marmoreus</i>				1
<i>Araneus miniatus</i>				1
<i>Argyrodes elevatus</i>	1			
<i>Bathyphantes pallidus</i>				1
<i>Castianeira cingulata</i>				1
<i>Castianeira longipalpa</i>				1
<i>Centromerus latidens</i>	1			
<i>Ceraticelus carinatus</i>				1
<i>Ceraticelus laetabilis</i>				1
<i>Ceraticelus similis</i>	1			1
<i>Cicurina arcuata</i>	1			
<i>Clubiona abboti</i>				1

Arachnids	Number of Dates of Observation			
	Hollow Rock Nature Park	Hollow Rock Nature Park	Mt. Moriah Bottomlands	New Hope Bottomlands
Species				
<i>Colonus sylvanus</i>				1
<i>Crustulina altera</i>	1			
<i>Dolomedes albineus</i>	1			
<i>Dolomedes tenebrosus</i>	1			1
<i>Dolomedes vittatus</i>	1			
<i>Drassyllus aprilius</i>	1			
<i>Drassyllus covensis</i>	1		1	
<i>Drassyllus ellipes</i>				1
<i>Drassyllus eremitus</i>			1	
<i>Eidmannella pallida</i>	1			1
<i>Elaver excepta</i>	1			
<i>Emertonella emertoni</i>				1
<i>Episinus amoenus</i>	1			
<i>Erigone autumnalis</i>				1
<i>Euryopsis funebris</i>				1
<i>Eustala anastera</i>				1
<i>Eustala emertoni</i>	1			
<i>Frontinella pyramitela</i>	1			1
<i>Gea heptagon</i>	1			
<i>Ghelna canadensis</i>	1			
<i>Gladicosa pulchra</i>				1
<i>Gnaphosa fontinalis</i>	1			
<i>Hahnia flaviceps</i>				1
<i>Hentzia palmarum</i>				1
<i>Hibana gracilis</i>	1			
<i>Hypsosinga rubens</i>	1			
<i>Hyptiotes cavatus</i>				1
<i>Larinia directa</i>	1			
<i>Lathys immaculata</i>	1			
<i>Lathys maculina</i>				1
<i>Leucauge venusta</i>	1			1
<i>Lyssomanes viridis</i>	1			
<i>Mangora gibberosa</i>	1			
<i>Mangora placida</i>	1			1
<i>Mangora spiculata</i>	1			1
<i>Marpissa lineata</i>	1		1	1
<i>Maymena ambita</i>	1			1
<i>Mecaphesa asperata</i>				1
<i>Mecynogea lemniscata</i>				1
<i>Mermessus maculatus</i>			1	1

Arachnids	Number of Dates of Observation			
	Hollow Rock Nature Park	Hollow Rock Nature Park	Mt. Moriah Bottomlands	New Hope Bottomlands
Species				
Mermessus tridentatus				1
Metepeira labyrinthea				1
Micrathena gracilis	1		1	1
Micrathena mitrata	1			1
Micrathena sagittata	1			1
Microdipoena guttata	1			1
Misumenoides formosipes				1
Neoantistea agilis				1
Neoscona arabesca				1
Neoscona crucifera				1
Neoscona domiciliorum	1			1
Nerienne radiata	1			
Origanates rostratus	1			1
Oxyopes aglossus	1			
Oxyopes salticus	1			1
Pachygnatha furcillata				1
Parasteatoda tepidariorum				1
Pardosa milvina	1			1
Pelegrina galathea	1			
Pelegrina proterva	1			
Peucetia viridans	1			1
Phidippus otiosus				1
Phidippus pius	1			
Philodromus marxi	1			
Pholcus phalangioides		1		
Phoroncidia americana	1			
Phrurotimpus annulatus				1
Phrurotimpus borealis	1			
Phrurotimpus umbratilis				1
Pirata alachuus	1		1	1
Pirata iviei				1
Piratula insularis			1	
Pisaurina brevipes				1
Pisaurina mira	1			1
Platycryptus undatus	1			
Rabidosa punctulata	1			
Rabidosa rabida	1			
Robertus riparius			1	1
Sarinda hentzi	1			
Schizocosa avida	1			1

Arachnids	Number of Dates of Observation			
	Hollow Rock Nature Park	Hollow Rock Nature Park	Mt. Moriah Bottomlands	New Hope Bottomlands
Scotinella divinula	1			
Scotinella fratrella				1
Scotinella redempta	1			
Souessoula parva				1
Synema parvulum	1			
Tenuiphantes sabulosus	1			
Tetragnatha caudata	1			
Tetragnatha elongata				1
Tetragnatha laboriosa	1			1
Theridion differens				1
Theridion frondeum	1			
Theridula emertoni	1			
Theridula opulenta				1
Tigrosa georgicola				1
Tmarus angulatus				1
Trachelas similis				1
Trebacosa marxi			1	1
Tusukuru hartlandianus	1			1
Verrucosa arenata	1			
Wulfila albens	1			1
Wulfila saltabundus				1
Xysticus ferox	1		1	
Zygoballus sexpunctatus	1			
Grand Total	75	1	12	86

Appendix 7. Summary of Odonate Observations

Table 1. Odonate Species List from the Project Area

The 39 odonate species from the survey area are listed along with the number of dates on which each was observed; data are summarized at the bottom. Sightings made prior to 2021 are shown in the righthand column. Thirty-five odonate species were observed during 2021-2022, and four species were recorded prior to that. The NatureServe state rank is given for six species whose conservation status in NC¹ is other than S5.

Odonate Species	Number of observation dates during 2021-2022			# Dates prior to 2021-2022
	New Hope Bottomlands	Mt. Moriah Bottomlands	Hollow Rock Nature Park	Various Localities ²
DRAGONFLIES (31 SPECIES)				
Darners (Aeshnidae)				
Common Green Darner (<i>Anax junius</i>)	1		2	
Springtime Darner (<i>Basiaeshna janata</i>)	1		1	1 ^{HR} 1 ^{DF}
Fawn Darner (<i>Boyeria vinosa</i>)			1	1 ^{MM}
Swamp Darner (<i>Epiaeschna heros</i>)	2		3	1 ^{MM} 1 ^{HR}
Cyrano Darner (<i>Nasiaeschna pentacantha</i>) S4S5	2	1		1 ^{MM} 1 ^{OC}
Clubtails (Gomphidae)				
Black-shouldered Spinyleg (<i>Dromogomphus spinosus</i>)			6	1 ^{HR} 1 ^{DF}
Dragonhunter (<i>Hagenius brevistylus</i>)			1	
Lancet Clubtail (<i>Phanogomphus exilis</i>)	1		2	1 ^{HR} 1 ^{DF} 1 ^{OC}
Ashy Clubtail (<i>Phanogomphus lividus</i>)	1		10	2 ^{DF}
Common Sanddragon (<i>Progomphus obscurus</i>)	1		2	1 ^{MM} 1 ^{HR} 1 ^{DF}
Spiketails (Cordulegastridae)				
Twin-spotted Spiketail (<i>Cordulegaster maculata</i>) S4S5			2	
Arrowhead Spiketail (<i>Cordulegaster obliqua</i>) S3			1	
Cruisers (Macromiidae)				
Stream Cruiser (<i>Didymops transversa</i>)			3	1 ^{HR} 1 ^{DF}
Emeralds (Corduliidae)				
Common Baskettail (<i>Epithea synosura</i>)	1		9	1 ^{DF} 1 ^{OC}

Odonate Species	Number of observation dates during 2021-2022			# Dates prior to 2021-2022
	New Hope Bottomlands	Mt. Moriah Bottomlands	Hollow Rock Nature Park	Various Localities ²
Prince Baskettail (<i>Epithea princeps</i>)			3	
Uhler's Sundragon (<i>Helocordulia uhleri</i>) S3S4			1	1 ^{DF}
Umber Shadowdragon (<i>Neurocordulia obsoleta</i>) S4				1 ^{MM}
Mocha Emerald (<i>Somatochlora linearis</i>)			1	1 ^{MM} 1 ^{HR} 1 ^{OC}
Skimmers (Libellulidae)				
Calico Pennant (<i>Celithemis elisa</i>)			1	
Swift Setwing (<i>Dythemis velox</i>) S4S5			2	
Eastern Pondhawk (<i>Erythemis simplicicollis</i>)	7	1	10	1 ^{MM}
Blue Corporal (<i>Ladona deplanata</i>)				1 ^{DF}
Spangled Skimmer (<i>Libellula cyanea</i>)				1 ^{MM}
Slaty Skimmer (<i>Libellula incesta</i>)		1	5	
Widow Skimmer (<i>Libellula luctuosa</i>)			4	2 ^{HR}
Painted Skimmer (<i>Libellula semifasciata</i>)			1	
Great Blue Skimmer (<i>Libellula vibrans</i>)	12	2	9	1 ^{NH} 1 ^{MM} 1 ^{HR}
Blue Dasher (<i>Pachydiplax longipennis</i>)	5	1	3	1 ^{MM}
Wandering Glider (<i>Pantala flavescens</i>)	2			
Eastern Amberwing (<i>Perithemis tenera</i>)	2	1	2	1 ^{MM}
Common Whitetail (<i>Plathemis lydia</i>)	14	1	16	2 ^{HR} 1 ^{MM} 2 ^{DF} 1 ^{OC}
DAMSELFLIES (8 SPECIES)				
Broad-winged Damsels (Calopterygidae)				
Ebony Jewelwing (<i>Calopteryx maculata</i>)	7	2	2	2 ^{NH} 2 ^{HR}
Pond Damsels (Coeagrionidae)				
Blue-fronted Dancer (<i>Argia apicalis</i>)			1	
Powdered Dancer (<i>Argia moesta</i>)				1 ^{HR} 1 ^{DF}
Blue-tipped Dancer (<i>Argia tibialis</i>)	4	1	8	2 ^{HR} 1 ^{DF}
Dusky Dancer (<i>Argia translata</i>)			3	
Stream Bluet (<i>Enallagma exsulans</i>)		1		1 ^{HR} 1 ^{DF}
Citrine Forktail (<i>Ischnura hastata</i>)			2	

Odonate Species	Number of observation dates during 2021-2022			# Dates prior to 2021-2022
	New Hope Bottomlands	Mt. Moriah Bottomlands	Hollow Rock Nature Park	Various Localities ²
Fragile Forktail (<i>Ischnura posita</i>)	1	1	5	1 ^{DF}
Number of visits during which odonates were observed:	20	2	27	17
Total hours spent on visits when odonates were seen³:	12	5	39	Unknown
Number of species observed:	17	11	32	26

1. Conservation status: NatureServe state ranks for NC.

S3 = Rare or uncommon in NC.

S3S4 = Status is intermediate between S3 and S4.

S4 = Apparently secure in NC, though it may be quite rare in parts of its range, especially at the periphery.

S4S5 = Status is intermediate between apparently secure (S4) and demonstrably secure (S5).

2. Locality codes for observations made prior to 2021. The number of observation dates and the locality are indicated by a numeral with a superscript locality code. For example, prior observations of Blue-tipped Dancers (*Argia tibialis*) were made on two dates at Hollow Rock Nature Preserve and on one date in Duke Forest.

NH = New Hope Bottomlands

MM = Mount Moriah Bottomlands

HR = Hollow Rock Nature Park

DF = Duke Forest along New Hope Creek from Erwin Road upstream to the vicinity of the Hollow Rock

OC = Old Chapel Hill Road Bottomlands

3. Although odonates were the primary target species for John Petranka's site visits, a significant portion of the visit time may have been spent documenting other taxa.

Table 2. Survey Site Habitats and Uses, and the Number of Odonate Species Recorded at Each Site

Site	Subsite - Station	Station Habitat and potential odonate uses ^a	# Species
Hollow Rock Nature Park	W. of Pickett Rd. - New Hope Creek	New Hope Creek and its floodplain - br, fd	22
Hollow Rock Nature Park	W. of Pickett Rd. - Meadow	Meadow and adjacent mowed area - fd	20
Hollow Rock Nature Park	Pickett Road Edges	Cleared edges of a gravel road - fd	16
Hollow Rock Nature Park	W. of Pickett Rd. - Loop Trail	Dry to mesic forest - fd; passes a beaver pond - br, fd	10
Hollow Rock Nature Park	E. of Picket Rd. - Dry Oak-Hickory Forest	Small headwater streams, +/- sandy bottomed - br, fd	3
Hollow Rock Nature Park	E. of Picket Rd. - Bottomland	Limited area of small streams along Pickett Rd. - br, fd	2
Mount Moriah Bottomlands	All subsites	Floodplain pools, slow streams, beaver-pond - br, fd	16
New Hope Creek Bottomlands	Edge Trail (plus the paved trail to Old Chapel Hill Rd.)	Borders various forest types and a playing field - fd	10
New Hope Creek Bottomlands	Powerline Clearings	Herbicide-maintained; some marshy areas - br, fd	10
New Hope Creek Bottomlands	Loop Trail	Woodlands; East section borders New Hope Cr. - br, fd	8
New Hope Creek Bottomlands	Flood channels and oxbows	Subject to periodic flooding; may also dry up - br, fd	3
Previous observations made along New Hope Creek at sites nearby the current survey area:			
Duke Forest, Hollow Rock Area ^b	New Hope Creek just upstream of Erwin Rd.	Riffles, pools, & runs, w/sandy to rocky bottoms - br, fd	14
Old Chapel Hill Rd. Bottomlands ^c	Upstream from NC 54 Wildlife Impoundment	New Hope Creek & associated floodplain pools - br, fd	4

- a. **br** = breeding habitat for certain species; **fd** = feeding habitat.
- b. Observations made by John Petranka on 4 dates between 4/7/16 and 7/1/20.
- c. Observations made by Steve Hall on 4/14/92 and 6/19/92 as a part of a study (Hall, S., 1995) of wildlife habitats, movement corridors, and rare animals of Durham County.

Appendix 8. Summary of Orthopteran Observations

Orthoptera	Number of Dates of Observation			
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	New Hope Bottomlands	Grand Total
<i>Allonemobius fultoni</i>			1	1
<i>Allonemobius griseus funeralis</i>			3	3
<i>Allonemobius maculatus</i>	1		2	3
<i>Allonemobius socius</i>	1		14	15
<i>Allonemobius tinnulus</i>		1	8	9
<i>Allonemobius unidentified species</i>	1			1
<i>Allonemobius walkeri</i>			4	4
<i>Anaxipha exigua</i>			2	2
<i>Anaxipha thomasi</i>			1	1
<i>Anaxipha tinnulacita</i>		1	1	2
<i>Anaxipha tinnulenta</i>	1		8	9
<i>Anaxipha unidentified species</i>	1		4	5
<i>Anaxipha vernalis</i>	1	1	9	11
<i>Arphia sulphurea</i>	1			1
<i>Atlanticus pachymerus</i>	2			2
<i>Camptonotus carolinensis</i>	1			1
<i>Chortophaga viridifasciata</i>	3			3
<i>Conocephalus brevipennis</i>	2		5	7
<i>Conocephalus fasciatus</i>			1	1
<i>Cycloptilum tardum</i>	2		1	3
<i>Cyrtoxipha columbiana</i>			1	1
<i>Dichromorpha viridis</i>	2		6	8
<i>Eunemobius carolinus</i>	5		16	21
<i>Eunemobius confusus</i>		1	1	2
<i>Gryllus fultoni</i>	1		4	5
<i>Gryllus rubens</i>		1	13	14
<i>Hapithus agitator</i>	1		2	3
<i>Melanoplus differentialis</i>			1	1
<i>Melanoplus femurrubrum</i>	1			1
<i>Melanoplus scudderi</i>	1		2	3
<i>Metaleptea brevicornis</i>	3		7	10
<i>Microcentrum retinerve</i>	1		3	4
<i>Neoconocephalus retusus</i>			1	1
<i>Neocurtilla hexadactyla</i>			2	2
<i>Oecanthus niveus</i>	1			1
<i>Orchelimum erythrocephalum</i>	1			1

Orthoptera	Number of Dates of Observation			
Species	Hollow Rock Nature Park	Mt. Moriah Bottomlands	New Hope Bottomlands	Grand Total
<i>Orchelimum pulchellum</i>			2	2
<i>Orocharis luteolira</i>	2		4	7
<i>Orocharis saltator</i>	3		4	7
<i>Orocharis unidentified species</i>			1	1
<i>Paratettix cucullatus</i>	2		1	3
<i>Paroxya clavuligera</i>			1	1
<i>Phyllopalpus pulchellus</i>	4	2	12	18
<i>Pterophylla camellifolia</i>			1	1
<i>Schistocerca americana</i>	1			1
<i>Scudderia cuneata</i>		1	2	3
<i>Scudderia unidentified species</i>	1			1
<i>Syrbula admirabilis</i>			1	1
<i>Tetrix arenosa</i>			1	1
<i>Tettigidea armata</i>			1	1
<i>Tettigidea lateralis</i>			2	2
<i>Velarifictorus micado</i>			7	7
Grand Total	47	8	163	219

Appendix 9. Summary of Hemipteran Hopper Observations

Non-target Taxa	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
HEMIPTERAN HOPPERS					
<i>Acanalonia bivittata</i>				2	
<i>Acutalis tartarea</i>	1				
<i>Balclutha unidentified species</i>	1				
<i>Chionomus puellus</i>	1				
<i>Chlorotettix unidentified species</i>				1	
<i>Draeculacephala balli</i>	1				
<i>Draeculacephala unidentified species</i>	1				
<i>Empoascini unidentified species</i>				1	
<i>Erasmoneura atra or nigra</i>				1	
<i>Flatormenis proxima</i>				1	
<i>Flexamia unidentified species</i>	1				
<i>Graminella nigrifrons</i>	2				
<i>Graminella villica</i>	2				
<i>Graphocephala unidentified species</i>				1	
<i>Graphocephala versuta</i>	4			4	
<i>Gyponana unidentified species</i>				2	
<i>Homalodisca vitripennis</i>	1			1	
<i>Jikradia olitoria</i>	2			1	
<i>Laevicephalus unidentified species</i>	1				
<i>Lepyronia quadrangularis</i>				4	
<i>Liburniella ornata</i>	2				
<i>Melanoliarius placitus</i>				1	
<i>Metcalfa pruinosa</i>				1	
<i>Oncometopia orbona</i>				2	
<i>Ormenoides venusta</i>				1	
<i>Planicephalus flavicosta_flavocostatus complex</i>	1				
<i>Plesiommata tripunctata</i>	1				
<i>Polyamia weedi</i>	1				
<i>Prosapia bicincta</i>	2			1	
<i>Scaphoideus immistus</i>				1	
<i>Scaphytopius rubellus</i>	1				
<i>Sibovia occatoria</i>	2			3	
<i>Spissistilus festinus</i>	1				
<i>Stenocranus lautus</i>				1	

Non-target Taxa	Number of Dates of Observation				
Species	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Stictocephala brevitylus</i>				2	
<i>Tylozygus bifidus</i>	1				
Grand Total	30	0	0	32	0

Appendix 10. Summary of Butterfly Observations

Butterflies	Number of Observation Dates				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
Swallowtails					
<i>Eurytides marcellus</i>	4			8	2
<i>Pterourus glaucus</i>		2		3	1
<i>Pterourus troilus</i>				1	2
Sulfurs					
<i>Abaeis nicippe</i>					1
<i>Phoebis sennae</i>				2	1
<i>Pyrisitia lisa</i>				1	
Whites					
<i>Anthocharis midea</i>	3				2
<i>Pieris rapae</i>	2				
Hairstreaks					
<i>Calycopis cecrops</i>	3	1			
Blues					
<i>Celastrina neglecta</i>		2			
<i>Cupido comyntas</i>	4	1		2	2
Snouts					
<i>Libytheana carinenta</i>	1	1		1	1
Milkweed Butterflies				1	
<i>Danaus plexippus</i>				1	
Fritillaries					
<i>Argynnis cybele</i>	1				
Admirals					
<i>Limenitis archippus</i>				2	
<i>Limenitis arthemis</i>		1		2	
Emperors					
<i>Asterocampa celtis</i>	2	1		2	
<i>Asterocampa clyton</i>		1			
Brushfoots					
<i>Junonia coenia</i>				1	
<i>Nymphalis antiopa</i>	1			2	
<i>Polygonia comma</i>	3			5	1
<i>Polygonia interrogationis</i>		2		2	1
<i>Vanessa atalanta</i>		1		1	
<i>Vanessa virginiensis</i>	5			1	

Butterflies	Number of Observation Dates				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
Checkerspots					
<i>Chlosyne nycteis</i>	3	1			
Crescents					
<i>Phyciodes tharos</i>	2		1	10	
Satyrs					
<i>Cercyonis pegala</i>				1	
<i>Cyllopsis gemma</i>	1				
<i>Hermeuptychia sosybius</i>	3	2	1	2	1
<i>Lethe appalachia</i>	2	3		10	
<i>Megisto cymela</i>	1	1		1	
Dicot Skippers				1	1
<i>Epargyreus clarus</i>				1	1
Spread-wing Skippers					
<i>Burnsius communis</i>	1			2	
<i>Erynnis horatius</i>	0	1			
<i>Erynnis juvenalis</i>	3	1			3
Grass Skippers					
<i>Euphyes vestris</i>				2	
<i>Hylephila phyleus</i>		1		2	
<i>Lerema accius</i>				4	
<i>Lon zabulon</i>	2			5	
<i>Vernia verna</i>				1	
Grand Total	47	23	2	78	19

Appendix 11. Summary of Macro-Moth Observations

Table 1. Checklist of the Macro-moths Recorded in the New Hope Creek Biodiversity Survey

Family	P3 Number	MONA Number	Scientific Name	Common Name	Number of Individuals	Number of Dates
Saturniidae	890012	7704	<i>Eacles imperialis</i>	Imperial Moth	1	1
Saturniidae	890017	7723	<i>Anisota virginiensis</i>	Pink-striped Oakworm Moth	1	1
Saturniidae	890055	7746	<i>Automeris io</i>	Io Moth	1	1
Saturniidae	890070	7757	<i>Antheraea polyphemus</i>	Polyphemus Moth	2	2
Saturniidae	890080	7765	<i>Callosamia angulifera</i>	Tulip-tree Silkmoth	1	1
Sphingidae	890100	7784	<i>Dolba hylaeus</i>	Pawpaw Sphinx	1	1
Sphingidae	890147	7827	<i>Amorpha juglandis</i>	Walnut Sphinx	1	1
Sphingidae	890182	7859	<i>Eumorpha pandorus</i>	Pandorus Sphinx	2	2
Sphingidae	890207	7885	<i>Darapsa myron</i>	Virginia Creeper Sphinx	1	1
Geometridae	910031	7196	<i>Eulithis diversilineata</i>	Lesser Grapevine Looper	6	4
Geometridae	910032	7197	<i>Eulithis gracilineata</i>	Greater Grapevine Looper	1	1
Geometridae	910258	7414	<i>Orthonama obstipata</i>	Gem Moth	7	2
Geometridae	910260	7416	<i>Costaconvexa centrostrigaria</i>	Bent-line Carpet Moth	1	1
Geometridae	910286	7440	<i>Eubaphe mendica</i>	Beggar Moth	1	1
Geometridae	910292	7445	<i>Horisme intestinata</i>	Brown Bark Carpet Moth	4	4
Geometridae	910324	7474	<i>Eupithecia miserulata</i>	Common Eupithecia Moth	16	5
Geometridae	910488	7647	<i>Heterophleps triguttaria</i>	Three-spotted Fillip	3	2
Geometridae	910511	7105	<i>Idaea scintillularia</i>	Diminutive Wave Moth	2	2
Geometridae	910540	7132	<i>Pleuroprucha insularia</i>	Common Tan Wave Moth	6	2
Geometridae	910544	7136	<i>Cyclophora packardi</i>	Packard's Wave Moth	1	1
Geometridae	910567	7159	<i>Scopula limboundata</i>	Large Lace-border Moth	3	3
Geometridae	910591	7181	<i>Lophosis labeculata</i>	Stained Lophosis Moth	1	1
Geometridae	910627	7046	<i>Nemoria bistriaria</i>	Red-fringed Emerald	3	2
Geometridae	910640	7059	<i>Synchlora frondaria</i>	Southern Emerald Moth	2	1
Geometridae	910658	7075	<i>Chloropteryx tepperaria</i>	Angle-winged Emerald	1	1
Geometridae	910676	7010	<i>Nematocampa resistaria</i>	Horned Spanworm Moth	19	4
Geometridae	910750	6326	<i>Macaria aemulataria</i>	Common Angle	11	5
Geometridae	910752	6331	<i>Macaria promiscuata</i>	Promiscuous Angle	1	1
Geometridae	910758	6341	<i>Macaria bicolorata</i>	Bicolored Angle	2	2
Geometridae	910858	6443	<i>Glenoides texanaria</i>	Texas Gray Moth	15	5
Geometridae	911004	6586	<i>Iridopsis defectaria</i>	Brown-shaded Gray Moth	3	3
Geometridae	911017	6598	<i>Protoboarmia porcelaria</i>	Porcelain Gray Moth	1	1
Geometridae	911018	6599	<i>Epimecis hortaria</i>	Tulip-tree Beauty Moth	3	3
Geometridae	911059	6620	<i>Melanolophia canadaria</i>	Canadian Melanolophia Moth	32	9
Geometridae	911075	6654	<i>Hypagyrtis unipunctata</i>	One-spotted Variant Moth	13	5
Geometridae	911081	6660	<i>Phigalia strigataria</i>	Small Phigalia Moth	1	1
Geometridae	911083	6662	<i>Paleacrita vernata</i>	Spring Cankerworm Moth	1	1
Geometridae	911132	6711	<i>Ilexia intractata</i>	Black-dotted Ruddy Moth	2	1
Geometridae	911151	6726	<i>Euchlaena obtusaria</i>	Obtuse Euchlaena	1	1
Geometridae	911158	6733	<i>Euchlaena amoenaria</i>	Deep Yellow Euchlaena	1	1
Geometridae	911168	6743	<i>Xanthotype sospeta</i>	Crocus Geometer Moth	1	1
Geometridae	911258	6826	<i>Metarranthis hypochraria</i>	Common Metarranthis Moth	1	1
Geometridae	911261	6828	<i>Metarranthis homuraria</i>	Purplish Metarranthis Moth	2	2
Geometridae	911384	6941	<i>Eusarca confusaria</i>	Confused Eusarca Moth	3	2
Geometridae	911414	6966	<i>Eutrapela clemataria</i>	Curve-toothed Geometer Moth	17	6
Geometridae	911432	6982	<i>Prochoerodes lineola</i>	Large Maple Spanworm Moth	3	3
Notodontidae	930024	7936	<i>Furcula borealis</i>	White Furcula Moth	1	1

Family	P3 Number	MONA Number	Scientific Name	Common Name	Number of Individuals	Number of Dates
Notodontidae	930033	7902	<i>Datana ministra</i>	Yellow-necked Caterpillar Moth	20	1
Notodontidae	930034	7903	<i>Datana angusii</i>	Angus's Datana Moth	2	2
Notodontidae	930038	7907	<i>Datana integerrima</i>	Walnut Caterpillar Moth	4	1
Notodontidae	930046	7915	<i>Nadata gibbosa</i>	White-dotted Prominent	3	2
Notodontidae	930048	7919	<i>Peridea basitriens</i>	Oval-Based Prominent	2	2
Notodontidae	930075	7983	<i>Heterocampa obliqua</i>	Oblique Heterocampa	6	4
Notodontidae	930090	7998	<i>Lochmaeus manteo</i>	Variable Oakleaf Caterpillar Moth	3	3
Notodontidae	930091	7999	<i>Lochmaeus bilineata</i>	Double-lined Prominent	9	5
Notodontidae	930098	8005	<i>Schizura ipomoeae</i>	Morning-glory Prominent	7	5
Notodontidae	930099	8006	<i>Schizura badia</i>	Chestnut Schizura Moth	1	1
Notodontidae	930104	8011	<i>Schizura leptinoides</i>	Black-blotched Schizura Moth	1	1
Notodontidae	930127	7951	<i>Symmerista albifrons</i>	White-headed Prominent	1	1
Notodontidae	930133	7957	<i>Dasylophia anguina</i>	Black-spotted Prominent	4	2
Erebidae	930204	8089	<i>Hypoprepia miniata</i>	Scarlet-winged Lichen Moth	2	2
Erebidae	930205	8090	<i>Hypoprepia fucosa</i>	Painted Lichen Moth	12	3
Erebidae	930215	8098	<i>Clemensia albata</i>	Little White Lichen Moth	5	4
Erebidae	930278	8169	<i>Apantesis phalerata</i>	Harnessed Tiger Moth	4	3
Erebidae	930279	8170	<i>Apantesis vittata</i>	Banded Tiger Moth	1	1
Erebidae	930316	8137	<i>Spilosoma virginica</i>	Virginian Tiger Moth	1	1
Erebidae	930341	8107	<i>Haploa clymene</i>	Clymene Moth	6	4
Erebidae	930360	8203	<i>Halysidota tessellaris</i>	Banded Tussock Moth	2	2
Erebidae	930404	8230	<i>Cycnia tenera</i>	Delicate Cycnia Moth	2	2
Erebidae	930469	8322	<i>Idia americalis</i>	American Idia Moth	2	2
Erebidae	930471	8323	<i>Idia aemula</i>	Common Idia Moth	5	4
Erebidae	930474	8326	<i>Idia rotundalis</i>	Rotund Idia Moth	1	1
Erebidae	930476	8328	<i>Idia julia</i>		1	1
Erebidae	930481	8333	<i>Idia denticulalis</i>	Toothed Idia Moth	1	1
Erebidae	930482	8334	<i>Idia lubricalis</i>	Glossy Black Idia Moth	1	1
Erebidae	930487	8338	<i>Phalaenophana pyramusalis</i>	Dark-banded Owlet Moth	1	1
Erebidae	930490	8341	<i>Zanclognatha theralis</i>		1	1
Erebidae	930502	8355	<i>Chytolita morbidalis</i>	Morbid Owlet Moth	1	1
Erebidae	930502	8356	<i>Chytolita petrealis</i>	Stone-winged Owlet Moth	3	2
Erebidae	930510	8358	<i>Macrochilo litophora</i>	Brown-lined Owlet Moth	4	3
Erebidae	930513	8363	<i>Phalaenostola eumelusalis</i>	Dark Phalaenostola Moth	5	3
Erebidae	930514	8364	<i>Phalaenostola larentioides</i>	Black-banded Owlet Moth	1	1
Erebidae	930516	8366	<i>Tetanolita mynesalis</i>	Smoky Tetanolita Moth	12	5
Erebidae	930518	8368	<i>Tetanolita floridana</i>	Florida Tetanolita Moth	4	3
Erebidae	930538	8386	<i>Renia adspersgillus</i>	Speckled Renia Moth	4	3
Erebidae	930547	8393	<i>Lascoria ambigualis</i>	Ambiguous Moth	3	3
Erebidae	930552	8398	<i>Palthis asopialis</i>	Faint-spotted Palthis Moth	6	5
Erebidae	930554	8400	<i>Redectis pygmaea</i>	Pygmy Redectis Moth	1	1
Erebidae	930555	8401	<i>Redectis vitrea</i>	White-spotted Redectis Moth	1	1
Erebidae	930560	8491	<i>Ledaea perditalis</i>	Lost Owlet Moth	6	3
Erebidae	930561	8441	<i>Hypena manalis</i>	Flowing-line Bomolocha	2	2
Erebidae	930562	8442	<i>Hypena baltimoralis</i>	Baltimore Bomolocha	1	1
Erebidae	930588	8465	<i>Hypena scabra</i>	Green Cloverworm Moth	1	1
Erebidae	930592	8404	<i>Rivula propinqualis</i>	Spotted Grass Moth	4	4
Erebidae	930622	8534	<i>Plusiodonta compressipalpis</i>	Moonseed Moth	3	2
Erebidae	930657	8432	<i>Sigela brauneata</i>	Braun's Quandry	1	1
Erebidae	930662	8421	<i>Hypenodes fractilinea</i>	Broken-line Hypenodes Moth	8	4
Erebidae	930668	8431	<i>Schrankia macula</i>	Black-spotted Schrankia Moth	17	7
Erebidae	930671	8428	<i>Dyspyralis nigellus</i>		1	1
Erebidae	930680	8500	<i>Metalectra quadrisignata</i>	Four-spotted Fungus Moth	1	1
Erebidae	930693	9076	<i>Eublemma minima</i>	Everlasting Bud Moth	1	1
Erebidae	930727	9038	<i>Hyperstrotia villificans</i>	White-lined Graylet Moth	1	1
Erebidae	930729	9037	<i>Hyperstrotia pervertens</i>	Dotted Graylet Moth	3	2

Family	P3 Number	MONA Number	Scientific Name	Common Name	Number of Individuals	Number of Dates
Erebidae	930770	8783	<i>Catocala angusi</i>	Angus' Underwing	1	1
Erebidae	930841	8857	<i>Catocala ultronia</i>	Ultronia Underwing	2	2
Erebidae	930862	8591	<i>Phoberia atomaris</i>	Common Oak Moth	16	3
Erebidae	930864	8592	<i>Cissusa spadix</i>	Black-dotted Brown Moth	1	1
Erebidae	930944	8745	<i>Mocis texana</i>	Texas Mocis Moth	2	2
Erebidae	930961	8727	<i>Parallela bistriaris</i>	Maple Looper	1	1
Erebidae	930970	8651	<i>Lesmone detrahens</i>	Detracted Owlet Moth	2	2
Erebidae	931026	8692	<i>Zale galbanata</i>	Maple Zale	3	2
Erebidae	931089	8587	<i>Panopoda rufimargo</i>	Red-lined Panopoda Moth	2	2
Euteliidae	931111	8962	<i>Paectes abrostoloides</i>	Large Paectes Moth	1	1
Nolidae	931121	8983	<i>Meganola minuscula</i>	Confused Meganola	1	1
Nolidae	931122	8983.1	<i>Meganola phylla</i>	Coastal Plain Meganola	1	1
Nolidae	931131	8991	<i>Nola cereella</i>	Sorghum Webworm Moth	16	4
Nolidae	931149	8970	<i>Baileya ophthalmica</i>	Eyed Baileya	11	2
Nolidae	931150	8971	<i>Baileya dormitans</i>	Sleeping Baileya	1	1
Noctuidae	931169	8889	<i>Ctenoplusia oxygramma</i>	Sharp-stigma Looper	1	1
Noctuidae	931191	8908	<i>Autographa precatationis</i>	Common Looper	1	1
Noctuidae	931284	9044	<i>Marimatha nigrofimbria</i>	Black-bordered Lemon Moth	18	7
Noctuidae	931290	9047	<i>Protodeltote muscosula</i>	Large Mossy Lithacodia Moth	41	6
Noctuidae	931421	9200	<i>Acronicta americana</i>	American Dagger	2	2
Noctuidae	931444	9227	<i>Acronicta laetifica</i>	Pleasant Dagger	1	1
Noctuidae	931453	9236	<i>Acronicta morula</i>	Ochre Dagger	1	1
Noctuidae	931454	9237	<i>Acronicta interrupta</i>	Interrupted Dagger	1	1
Noctuidae	931467	9249	<i>Acronicta increta</i>	Southern Oak Dagger	2	2
Noctuidae	931470	9251	<i>Acronicta retardata</i>	Retarded Dagger	1	1
Noctuidae	931544	9638	<i>Amphipyra pyramidoides</i>	Copper Underwing	1	1
Noctuidae	931724	9725	<i>Azenia obtusa</i>	Obtuse Yellow Moth	2	2
Noctuidae	931964	9299	<i>Eudryas unio</i>	Pearly Wood-nymph Moth	1	1
Noctuidae	932014	9713	<i>Condica cupentia</i>	Splotched Groundling Moth	1	1
Noctuidae	932018	9720	<i>Ogdoconta cinereola</i>	Common Pinkband Moth	2	1
Noctuidae	932025	9057	<i>Homophoberia apicosa</i>	Black Wedge-spot Moth	2	2
Noctuidae	932045	11068	<i>Helicoverpa zea</i>	Corn Earworm Moth	4	2
Noctuidae	932134	11128	<i>Schinia arcigera</i>	Arcigera Flower Moth	1	1
Noctuidae	932219	9669	<i>Spodoptera ornithogalli</i>	Yellow-striped Armyworm Moth	1	1
Noctuidae	932230	9679	<i>Elaphria chalcedonia</i>	Chalcedony Midget Moth	6	1
Noctuidae	932238	9684	<i>Elaphria grata</i>	Grateful Midget Moth	5	4
Noctuidae	932249	9688	<i>Galgula partita</i>	Wedgling Moth	3	2
Noctuidae	932269	9650	<i>Athesis tarda</i>	Slowpoke Moth	1	1
Noctuidae	932287	9522	<i>Iodopepla u-album</i>	White-eyed Borer	1	1
Noctuidae	932378	9404	<i>Oligia modica</i>	Black-banded Brocade Moth	1	1
Noctuidae	932464	9463	<i>Parapamea buffaloensis</i>	Buffalo Moth	1	1
Noctuidae	932517	9525	<i>Bellura obliqua</i>	Cattail Borer	1	1
Noctuidae	932532	9886	<i>Lithophane patefacta</i>	Dimorphic Pinion	1	1
Noctuidae	932616	9957	<i>Sunira bicolorago</i>	Bicolored Sallow	3	2
Noctuidae	932771	10488	<i>Orthosia garmani</i>	Garman's Quaker Moth	2	2
Noctuidae	932810	10524	<i>Nephelodes minians</i>	Bronzed Cutworm Moth	1	1
Noctuidae	932935	10438	<i>Mythimna unipuncta</i>	Armyworm Moth	2	2
Noctuidae	932960	10456	<i>Leucania adjuta</i>	Adjutant Wainscot Moth	3	3
Noctuidae	933044	10397	<i>Lacinipolia renigera</i>	Bristly Cutworm Moth	1	1
Noctuidae	933146	10288	<i>Orthodes detracta</i>	Disparaged Arches Moth	6	4
Noctuidae	933528	10663	<i>Agrotis ipsilon</i>	Ipsilon Dart Moth	2	2
Noctuidae	933529	10891	<i>Ochropleura implecta</i>	Flame-shouldered Dart Moth	1	1
Noctuidae	933536	10994	<i>Cerastis tenebrifera</i>	Reddish Speckled Dart Moth	2	2
Noctuidae	933543	10998	<i>Choephora fungorum</i>	Bent-line Dart Moth	3	1
Noctuidae	933626	10955	<i>Agnorisma badinodis</i>	Pale-banded Dart Moth	6	2
Noctuidae	933686	11043.1	<i>Abagrotis magnicupida</i>	One-dotted Dart	1	1

Table 2. Habitat Groups Used in the Comparison of Macro-moths from Brownwater River Floodplains

Food Type	Moisture Regime	Habitat	Macro-Moth Species
Litter-Dwelling Species			
Litter	Dry-Xeric	General Dry-Xeric Glades and Barrens	<i>Bleptina inferior</i>
Litter	Dry-Xeric	General Dry-Xeric Hardwood Forests	<i>Renia fraternalis</i>
Litter	General	General Forests	<i>Idia americalis</i>
Litter	General	General Forests	<i>Zanclognatha theralis</i>
Litter	General	General Forests and Fields	<i>Idia aemula</i>
Litter	General	General Forests and Fields	<i>Idia julia</i>
Litter	General	General Forests and Fields	<i>Idia rotundalis</i>
Litter	General	General Forests and Fields	<i>Phalaenostola larentioides</i>
Litter	General	General Forests and Fields	<i>Renia adspersgillus</i>
Litter	General	General Forests and Fields	<i>Zanclognatha lituralis</i>
Litter	General	General Forests and Shrublands	<i>Zanclognatha obscuripennis</i>
Litter	General	General Hardwood Forests	<i>Chytolita morbidalis</i>
Litter	General	General Hardwood Forests	<i>Idia forbesii</i>
Litter	General	General Hardwood Forests	<i>Idia lubricalis</i>
Litter	General	General Hardwood Forests	<i>Idia scobialis</i>
Litter	General	General Hardwood Forests	<i>Palthis asopialis</i>
Litter	General	General Hardwood Forests	<i>Phalaenophana pyramusalis</i>
Litter	General	General Hardwood Forests	<i>Renia factiosalis</i>
Litter	General	General Hardwood Forests	<i>Renia flavipunctalis</i>
Litter	General	General Hardwood Forests	<i>Zanclognatha jacchusalis</i>
Litter	General	General Hardwood Forests	<i>Zanclognatha marcidilinea</i>
Litter	General	General Mixed Habitats	<i>Bleptina caradrinalis</i>
Litter	General	General Mixed Habitats	<i>Idia diminuentis</i>
Litter	General	General Mixed Habitats	<i>Lascoria ambigualis</i>
Litter	General	General Mixed Habitats	<i>Tetanolita floridana</i>
Litter	General	General Mixed Habitats	<i>Tetanolita mynesalis</i>
Litter	Mesic	General Mesic Hardwood Forests	<i>Zanclognatha laevigata</i>
Litter	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Athetis tarda</i>
Litter	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Idia denticulalis</i>
Litter	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Renia discoloralis</i>
Litter	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Renia new species near discoloralis</i>
Litter	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Zanclognatha cruralis</i>
Litter	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Zanclognatha pedipalis</i>
Litter	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Zanclognatha protumnusalis</i>
Bark-Dwelling Species			
Fungi	General	General Forests	<i>Metalectra tantillus</i>
Fungi	General	General Forests	<i>Schrankia macula</i>
Fungi	General	General Hardwood Forests	<i>Metalectra discalis</i>
Fungi	General	General Hardwood Forests	<i>Metalectra quadrisignata</i>
Fungi	General	General Hardwood Forests	<i>Metalectra richardsi</i>
Fungi	General	General Mixed Habitats	<i>Chytonix palliatricula</i>
Lichens, Fungi, Algae	General	General Forests	<i>Cisthene plumbea</i>
Lichens, Fungi, Algae	General	General Forests	<i>Clemensia albata</i>
Lichens, Fungi, Algae	General	General Forests	<i>Crambidia pallida</i>
Lichens, Fungi, Algae	General	General Forests	<i>Glenoides texanaria</i>
Lichens, Fungi, Algae	General	General Forests	<i>Hypoprepia fucosa</i>
Lichens, Fungi, Algae	General	General Forests	<i>Hypoprepia miniata</i>

Food Type	Moisture Regime	Habitat	Macro-Moth Species
Lichens, Fungi, Algae	General	General Forests and Shrublands	<i>Cisthene packardii</i>
Lichens, Fungi, Algae	General	General Forests and Shrublands	<i>Elaphria versicolor</i>
Lichens, Fungi, Algae	General	General Hardwood Forests	<i>Crambidia uniformis</i>
Lichens, Fungi, Algae	General	General Hardwood Forests	<i>Nigetia formosalis</i>
Lichens, Fungi, Algae	General	General Mixed Habitats	<i>Elaphria grata</i>
Lichens, Fungi, Algae	General	General Pine Forests and Woodlands	<i>Crambidia lithosioides</i>
Lichens, Fungi, Algae	Wet-Mesic	General Wet-Mesic Forests	<i>Cisthene kentuckiensis</i>
Lichens, Fungi, Algae	Wet-Mesic	General Wet-Mesic Forests	<i>Elaphria georgei</i>
Lichens, Fungi, Algae	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Sigela brauneata</i>
Lichens, Fungi, Algae	Xeric-Mesic	Xeric-Mesic, Sandy Woodlands and Scrub	<i>Cisthene subjecta</i>
Wetland Herb-Feeding Species			
Wetland Forbs	Wet	General Open, Wet Forblands	<i>Condica confederata</i>
Wetland Forbs	Wet	General Open, Wet Forblands	<i>Condica cupentia</i>
Wetland Forbs	Wet	General Open, Wet Forblands	<i>Eudryas unio</i>
Wetland Forbs	Wet	General Open, Wet Forblands	<i>Phytometra rhodarialis</i>
Wetland Forbs	Wet-Hydric	General Broadleaf Herbaceous Mires	<i>Heterophleps triguttaria</i>
Wetland Forbs	Wet-Hydric	General Broadleaf Herbaceous Mires	<i>Hypena manalis</i>
Wetland Forbs	Wet-Hydric	General Broadleaf Herbaceous Mires	<i>Parapamea buffaloensis</i>
Wetland Forbs	Wet-Hydric	General Shoreline Forblands	<i>Homophoberia apicosa</i>
Wetland Forbs	Wet-Hydric	General Shoreline Forblands	<i>Spragueia leo</i>
Wetland Graminoids	Wet	General Wet Grasslands	<i>Leucanopsis longa</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Amolita fessa</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Amolita obliqua</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Deltote bellicula</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Hypenodes fractilinea</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Macrochilo hypocritalis</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Macrochilo litophora</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Macrochilo orciferalis</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Mesapamea fractilinea</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Renia sobrialis</i>
Wetland Graminoids	Wet-Hydric	General Sedge, Grass, and Rush Mires	<i>Rivula propinqualis</i>
Wetland Graminoids	Wet-Hydric	General Wet-Hydric Forests	<i>Rivula stepheni</i>
Wetland Herbs	Wet-Hydric	General Cattail and Tall Grass Marshes	<i>Bellura obliqua</i>
Bottomland Hardwood-Feeding Species			
Hardwoods	Wet	General Wet Hardwood Forests	<i>Acronicta betulae</i>
Hardwoods	Wet	General Wet Hardwood Forests	<i>Dasychira meridionalis</i>
Hardwoods	Wet	Rich Wet Hardwood Forests	<i>Halysidota harrisii</i>
Hardwoods	Wet	Rich Wet Hardwood Forests	<i>Misogada unicolor</i>
Hardwoods	Wet	Rich Wet Hardwood Forests	<i>Zale galbanata</i>
Hardwoods	Wet-Hydric	Shoreline Shrublands	<i>Acronicta connecta</i>
Hardwoods	Wet-Hydric	Shoreline Shrublands	<i>Catocala carissima</i>
Hardwoods	Wet-Hydric	Shoreline Shrublands	<i>Clostera inclusa</i>
Hardwoods	Wet-Hydric	Shoreline Shrublands	<i>Colobochyla interpuncta</i>
Hardwoods	Wet-Hydric	Shoreline Shrublands	<i>Digrammia gnophosaria</i>
Hardwoods	Wet-Hydric	Shoreline Shrublands	<i>Nycteola metaspilella</i>
Hardwoods	Wet-Hydric	Shoreline Shrublands	<i>Scoliopteryx libatrix</i>
Hardwoods	Wet-Mesic	General Poplar Forests	<i>Catocala amatrix</i>
Hardwoods	Wet-Mesic	General Poplar Forests	<i>Catocala marmorata</i>
Hardwoods	Wet-Mesic	General Poplar Forests	<i>Gluphisia septentrionis</i>
Hardwoods	Wet-Mesic	General Poplar Forests	<i>Raphia frater</i>
Hardwoods	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Dasychira tephra</i>
Hardwoods	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Datana angusii</i>
Hardwoods	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Hyperstrotia secta</i>
Hardwoods	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Hyperstrotia villificans</i>
Hardwoods	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Lochmaeus bilineata</i>
Hardwoods	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Lytrosis sinuosa</i>

Food Type	Moisture Regime	Habitat	Macro-Moth Species
Hardwoods	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Oligocentria semirufescens</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Acronicta morula</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Baileya australis</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Baileya dormitans</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Baileya levitans</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Catocala nebulosa</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Catocala neogama</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Catocala piatrix</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Hypena abalienalis</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Hypena madefactalis</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Nerice bidentata</i>
Hardwoods	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Peridea basitriens</i>
Shrubs and Trees	Wet	General Wet Hardwood Forests	<i>Cepphis decoloraria</i>
Shrubs and Trees	Wet	General Wet Hardwood Forests	<i>Hypomecis longipectinaria</i>
Shrubs and Trees	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Colocasia flavicornis</i>
Shrubs and Trees	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Colocasia propinquilinea</i>
Shrubs and Trees	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Drepana arcuata</i>
Shrubs and Trees	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Harrisimemna trisignata</i>
Shrubs and Trees	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Lithophane patefacta</i>
Shrubs and Trees	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Acronicta hamamelis</i>
Shrubs and Trees	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Trigrammia quadrinotaria</i>
Shrubs and Vines	Wet-Hydric	Shoreline Shrublands	<i>Achatodes zaeae</i>
Shrubs and Vines	Wet-Hydric	Shoreline Shrublands	<i>Bagisara rectifascia</i>
Shrubs and Vines	Wet-Hydric	Shoreline Shrublands	<i>Ledaea perditalis</i>
Shrubs and Vines	Wet-Hydric	Shoreline Shrublands	<i>Melanomma auricinctaria</i>
Shrubs and Vines	Wet-Mesic	General Wet-Mesic Acidic Shrublands	<i>Nola pustulata</i>
Shrubs and Vines	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Gondysia smithii</i>
Shrubs and Vines	Wet-Mesic	General Wet-Mesic Shrublands	<i>Nola clethrae</i>
Shrubs and Vines	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Callizzia amorata</i>
Shrubs and Vines	Wet-Mesic	Rich Wet-Mesic Hardwood Forests	<i>Catocala orba</i>
Woody Plants	Wet-Mesic	General Wet-Mesic Hardwood Forests	<i>Zale minerea</i>
General Hardwood-Feeding Species			
Hardwoods	Dry-Mesic	Persimmon Copses	<i>Exelis pyrolaria</i>
Hardwoods	Dry-Mesic	Persimmon Copses	<i>Hypsoropha hormos</i>
Hardwoods	Dry-Mesic	Persimmon Copses	<i>Hypsoropha monilis</i>
Hardwoods	Dry-Xeric	General Dry-Xeric Hardwood Forests	<i>Hyparpax aurora</i>
Hardwoods	General	General Ash Forests	<i>Ceratonia undulosa</i>
Hardwoods	General	General Ash Forests	<i>Copivaleria grotei</i>
Hardwoods	General	General Ash Forests	<i>Olceclostera angelica</i>
Hardwoods	General	General Forests and Shrublands	<i>Iridopsis defectaria</i>
Hardwoods	General	General Hardwood Forests	<i>Charadra deridens</i>
Hardwoods	General	General Hardwood Forests	<i>Paleacrita vernata</i>
Hardwoods	General	General Hardwood Forests	<i>Sericaglaea signata</i>
Hardwoods	General	General Hardwood Forests	<i>Sunira bicolorago</i>
Hardwoods	General	General Maple Forests	<i>Acronicta retardata</i>
Hardwoods	General	General Maple Forests	<i>Dryocampa rubicunda</i>
Hardwoods	General	General Maple Forests	<i>Hypena baltimoralis</i>
Hardwoods	General	General Maple Forests	<i>Macaria aemulataria</i>
Hardwoods	General	General Maple Forests	<i>Parallelia bistriaris</i>
Hardwoods	General	General Maple Forests	<i>Speranza pustularia</i>
Hardwoods	General	General Montane Mesic Forests	<i>Peridea ferruginea</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Acronicta afflicta</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Acronicta exilis</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Acronicta increta</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Acronicta lobeliae</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Acronicta modica</i>

Food Type	Moisture Regime	Habitat	Macro-Moth Species
Hardwoods	General	General Oak-Hickory Forests	<i>Anisota virginiensis</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Catocala connubialis</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Catocala ilia</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Catocala insolabilis</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Catocala lacrymosa</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Catocala lineella</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Catocala umbrosa</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Catocala vidua</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Cissusa spadix</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Cyclophora packardi</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Datana contracta</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Datana integerrima</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Heterocampa obliqua</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Heterocampa umbrata</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Hydriomena transfigurata</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Hyperstrotia pervertens</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Lacosoma chiridota</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Macrurocampa marthesia</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Meganola minuscula</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Meganola phylla</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Meganola spodia</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Oligocentria lignicolor</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Panopoda carneicosta</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Panopoda rufimargo</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Paraeschra georgica</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Peridea angulosa</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Phoberia atomaris</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Symmerista albifrons</i>
Hardwoods	General	General Oak-Hickory Forests	<i>Ulolonche culea</i>
Hardwoods	General	Gum and Tupelo Forests	<i>Allotria elonympha</i>
Hardwoods	General	Gum and Tupelo Forests	<i>Polygrammate cadburyi</i>
Hardwoods	General	Gum and Tupelo Forests	<i>Polygrammate hebraeicum</i>
Hardwoods	Mesic	General Mesic Hardwood Forests	<i>Callosamia angulifera</i>
Hardwoods	Mesic	General Mesic Hardwood Forests	<i>Hydriomena pluviata</i>
Hardwoods	Xeric-Mesic	Xeric-Mesic, Sandy Woodlands and Scrub	<i>Acronicta brumosa</i>
Herbs and Shrubs	General	General Hardwood Forests	<i>Protolampra brunneicollis</i>
Herbs and Shrubs	General	General Mixed Habitats	<i>Xestia dolosa</i>
Herbs, Shrubs, Trees	Dry-Mesic	General Dry-Mesic Forests	<i>Orthosia rubescens</i>
Herbs, Shrubs, Trees	General	General Forests	<i>Palthis angulalis</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Agnorisma badinodis</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Anavitrinella pampinaria</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Apantesis vittata</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Automeris io</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Haploa clymene</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Idea obfusaria</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Nematocampa resistaria</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Prochoerodes lineola</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Spaelotis clandestina</i>
Herbs, Shrubs, Trees	General	General Forests and Fields	<i>Spilosoma virginica</i>
Herbs, Shrubs, Trees	General	General Forests and Shrublands	<i>Scopula limboundata</i>
Herbs, Shrubs, Trees	General	General Hardwood Forests	<i>Apantesis nais</i>
Herbs, Shrubs, Trees	General	General Hardwood Forests	<i>Iridopsis larvaria</i>
Herbs, Shrubs, Trees	General	General Hardwood Forests	<i>Redectis vitrea</i>
Herbs, Shrubs, Trees	General	General Hardwood Forests	<i>Zale lunata</i>
Herbs, Shrubs, Trees	General	General Mixed Habitats	<i>Abagrotis magnicupida</i>
Herbs, Shrubs, Trees	General	General Mixed Habitats	<i>Apantesis phalerata</i>

Food Type	Moisture Regime	Habitat	Macro-Moth Species
Herbs, Shrubs, Trees	General	General Mixed Habitats	<i>Eupithecia miserulata</i>
Herbs, Shrubs, Trees	General	General Mixed Habitats	<i>Feltia herilis</i>
Herbs, Shrubs, Trees	General	General Mixed Habitats	<i>Hypena scabra</i>
Herbs, Shrubs, Trees	General	General Mixed Habitats	<i>Orgyia leucostigma</i>
Herbs, Shrubs, Trees	General	General Mixed Habitats	<i>Pleuroprucha insulsaria</i>
Herbs, Shrubs, Trees	General	General Mixed Habitats	<i>Spilosoma congrua</i>
Herbs, Shrubs, Trees	General	General Mixed Habitats	<i>Spodoptera ornithogalli</i>
Herbs, Shrubs, Trees	General	General Montane Forests and Fields	<i>Xanthotype sospeta</i>
Shrubs and Trees	Dry-Mesic	General Dry-Mesic Hardwood Forests	<i>Abagrotis alternata</i>
Shrubs and Trees	Dry-Mesic	Locust Groves and Thickets	<i>Celiptera frustulum</i>
Shrubs and Trees	Dry-Mesic	Locust Groves and Thickets	<i>Digrammia ocellinata</i>
Shrubs and Trees	Dry-Mesic	Rich Dry-Mesic Hardwood Forests	<i>Macaria promiscuata</i>
Shrubs and Trees	General	General Dogwood Thickets and Understories	<i>Euthyatira pudens</i>
Shrubs and Trees	General	General Dogwood Thickets and Understories	<i>Hypena bijugalis</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Acronicta longa</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Apatelodes torrefacta</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Artace cribrarius</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Citheronia regalis</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Cleora sublunaria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Datana ministra</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Epimecis hortaria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Euchlaena obtusaria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Euchlaena pectinaria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Eutrapela clemataria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Glena cribrataria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Halysidota tessellaris</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Heterocampa biundata</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Heterocampa guttivitta</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Hypagyrtis unipunctata</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Metarranthis duaria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Pero ancetaria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Phaeoura quernaria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Phigalia strigataria</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Schizura concinna</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Schizura ipomoeae</i>
Shrubs and Trees	General	General Forests and Shrublands	<i>Schizura unicornis</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Acronicta americana</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Acronicta impleta</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Actias luna</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Amorpha juglandis</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Amphipyra pyramidoides</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Antheraea polyphemus</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Dasychira basiflava</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Ennomos subsignaria</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Euchlaena amoenaria</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Hyphantria cunea</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Lochmaeus manteo</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Malacosoma disstria</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Nadata gibbosa</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Nemoria bistriaria</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Nemoria lixaria</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Orthosia alurina</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Orthosia garmani</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Paonias excaecata</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Plagodis alcoolaria</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Plagodis fervidaria</i>

Food Type	Moisture Regime	Habitat	Macro-Moth Species
Shrubs and Trees	General	General Hardwood Forests	<i>Probole amicarria</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Pseudothyatira cymatophoroides</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Schizura leptinoides</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Selenia kentaria</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Tetracis crocallata</i>
Shrubs and Trees	General	General Hardwood Forests	<i>Tolyte velleda</i>
Shrubs and Trees	General	General Rosaceous Thickets	<i>Acronicta clarescens</i>
Shrubs and Trees	General	General Rosaceous Thickets	<i>Acronicta hasta</i>
Shrubs and Trees	General	General Rosaceous Thickets	<i>Balsa labecula</i>
Shrubs and Trees	General	General Rosaceous Thickets	<i>Balsa tristrigella</i>
Shrubs and Trees	General	General Rosaceous Thickets	<i>Catocala clintonii</i>
Shrubs and Trees	General	General Rosaceous Thickets	<i>Lomographa vestaliata</i>
Shrubs and Trees	General	General Rosaceous Thickets	<i>Lytrosis unitaria</i>
Shrubs and Trees	General	General Rosaceous Thickets	<i>Malacosoma americana</i>
Shrubs and Trees	General	Mistletoe Woodlands	<i>Emarginea percara</i>
Shrubs and Trees	Mesic	General Mesic Hardwood Forests	<i>Orthodes detracta</i>
Shrubs and Trees	Xeric-Mesic	Xeric-Mesic, Sandy Woodlands and Scrub	<i>Pseudanthracia coracias</i>
Shrubs and Vines	Dry-Mesic	General Upland Heath Thickets	<i>Catocala andromedae</i>
Shrubs and Vines	Dry-Mesic	Sweetleaf Thickets	<i>Morrisonia triangula</i>
Shrubs and Vines	General	General Forests and Shrublands	<i>Dolba hylaeus</i>
Shrubs and Vines	General	General Greenbrier Tangles	<i>Phosphila miselioides</i>
Shrubs and Vines	General	General Greenbrier Tangles	<i>Phosphila turbulenta</i>
Shrubs and Vines	General	General Hardwood Forests	<i>Nola triquetrana</i>
Shrubs and Vines	General	General Rosaceous Thickets	<i>Catocala crataegi</i>
Shrubs and Vines	General	General Rosaceous Thickets	<i>Catocala grynea</i>
Shrubs and Vines	General	General Rosaceous Thickets	<i>Catocala mira</i>
Shrubs and Vines	General	General Rosaceous Thickets	<i>Catocala ultronia</i>
Shrubs and Vines	General	General Rosaceous Thickets	<i>Cerma cora</i>
Shrubs and Vines	General	General Rosaceous Thickets	<i>Paonias myops</i>
Shrubs and Vines	General	General Rosaceous Thickets	<i>Zale intenta</i>
Shrubs and Vines	General	General Sumac Thickets and Poison Ivy Tangles	<i>Dichorda iridaria</i>
Shrubs and Vines	General	General Sumac Thickets and Poison Ivy Tangles	<i>Eutelia pulcherrimus</i>
Shrubs and Vines	General	General Sumac Thickets and Poison Ivy Tangles	<i>Marathyssa basalis</i>
Shrubs and Vines	General	General Sumac Thickets and Poison Ivy Tangles	<i>Marathyssa inficita</i>
Shrubs and Vines	General	General Sumac Thickets and Poison Ivy Tangles	<i>Paectes oculatrix</i>
Shrubs and Vines	General	General Viburnum Thickets	<i>Calledapteryx dryopterata</i>
Shrubs and Vines	General	General Viburnum Thickets	<i>Metaxaglaea inulta</i>
Shrubs and Vines	General	General Viburnum Thickets	<i>Oreta rosea</i>
Shrubs and Vines	General	General Viburnum Thickets	<i>Schizura badia</i>
Shrubs and Vines	General	General Viburnum Thickets	<i>Zale horrida</i>
Shrubs and Vines	General	Montane Rosaceous Thickets	<i>Catocala blandula</i>
Shrubs and Vines	General	Myricaceous Thickets	<i>Cyclophora myrtaria</i>
Shrubs and Vines	General	St. John's-wort Thickets	<i>Iodopepla u-album</i>
Shrubs and Vines	General	St. John's-wort Thickets	<i>Nedra ramosula</i>
Trees	General	General Forests	<i>Melanolophia canadaria</i>
Trees	General	General Forests	<i>Melanolophia signataria</i>
Woody Plants	Dry-Mesic	General Dry-Mesic Hardwood Forests	<i>Achatia distincta</i>
Woody Plants	General	General Forests and Shrublands	<i>Eacles imperialis</i>
Woody Plants	General	General Forests and Shrublands	<i>Egira alternans</i>
Woody Plants	General	General Forests and Shrublands	<i>Morrisonia confusa</i>
Woody Plants	General	General Forests and Shrublands	<i>Protoboarmia porcelaria</i>
Woody Plants	General	General Hardwood Forests	<i>Besma quercivoraria</i>
Woody Plants	General	General Hardwood Forests	<i>Crocigrapha normani</i>
Woody Plants	General	General Hardwood Forests	<i>Ectropis crepuscularia</i>
Woody Plants	General	General Hardwood Forests	<i>Himella fidelis</i>
Woody Plants	General	General Hardwood Forests	<i>Orthosia hibisci</i>

Appendix 12. Summary of Micro-Moth Observations

Micro-moths	Number of Dates of Observation		
	Hollow Rock Nature Park	Mud Creek Bottomlands	New Hope Bottomlands
Amphisbatidae			3
<i>Psilocorsis reflexella</i>			3
Autostichidae			7
<i>Gerdana caritella</i>			6
<i>Oegoconia novimundi</i>			1
Blastobasidae			
<i>Blastobasis glandulella</i>			2
<i>Pigritia murtfeldtella</i>			1
<i>Pigritia unidentified species</i>			1
Bucculatricidae			
<i>Bucculatrix ivella</i>			4
<i>Bucculatrix pomifoliella</i>	3		
<i>Bucculatrix unidentified species</i>			2
Coleophoridae			
<i>Coleophora ostryae</i>	1		
<i>Coleophora unidentified species</i>			2
Cosmopterigidae			
<i>Cosmopterix clandestinella</i>			1
<i>Cosmopterix clemensella</i>	1		
<i>Cosmopterix teligera</i>			2
<i>Perimede ricina</i>			2
Crambidae			
<i>Agriphila ruricolellus</i>			1
<i>Anageshna primordialis</i>			11
<i>Anania extricalis</i>			2
<i>Argyria critica</i>			1
<i>Argyria lacteella</i>			1
<i>Crambus agitatellus</i>		1	6
<i>Crocidophora tuberculalis</i>			1
<i>Desmia funeralis</i>			1
<i>Desmia maculalis</i>			3
<i>Diatraea lisseta</i>			1
<i>Donacaula unidentified species</i>			1
<i>Elophila oblitalis</i>			3
<i>Eoreuma densella</i>			4
<i>Epipagis fenestralis</i>			1

Micro-moths	Number of Dates of Observation		
	Hollow Rock Nature Park	Mud Creek Bottomlands	New Hope Bottomlands
<i>Eudonia heterosalis</i>			3
<i>Fissicrambus mutabilis</i>			1
<i>Framinghamia helvalis</i>			1
<i>Haimbachia placidella</i>			2
<i>Haimbachia squamulella</i>			1
<i>Herpetogramma abdominalis</i>			3
<i>Herpetogramma aeglealis</i>			1
<i>Herpetogramma bipunctalis</i>			1
<i>Herpetogramma fluctuosalis</i>			1
<i>Herpetogramma pertextalis</i>			1
<i>Lipocosmodes fuliginosalis</i>			1
<i>Loxostegopsis merrickalis</i>			6
<i>Microcrambus biguttellus</i>			5
<i>Microcrambus elegans</i>			8
<i>Nascia acutellus</i>			4
<i>Neodactria caliginosellus</i>			3
<i>Neodactria luteolellus</i>			4
<i>Neodactria zeellus</i>			1
<i>Palpita freemanalis</i>			1
<i>Palpita magniferalis</i>			5
<i>Parapediasia teterrellus</i>			8
<i>Polygrammodes flavidalis</i>			1
<i>Raphiptera argillaceellus</i>			2
<i>Saucrobotys futilalis</i>		1	
<i>Scoparia basalis</i>			4
<i>Udea rubigalis</i>			8
<i>Xubida panalope</i>			5
Elachistidae			
<i>Antaeotricha leucillana</i>			4
<i>Antaeotricha schlaegeri</i>			2
<i>Antaeotricha unidentified species</i>			2
<i>Elachista illectella</i>			3
<i>Elachista unidentified species</i>			3
Epipyropidae			
<i>Fulgoraecia exigua</i>			1
Eriocraniidae			
<i>Dyseriocrania griseocapitella</i>			4
Gelechiidae			

Micro-moths	Number of Dates of Observation		
	Hollow Rock Nature Park	Mud Creek Bottomlands	New Hope Bottomlands
<i>Anacamptis conclusella</i>			1
<i>Anacamptis consonella</i>			1
<i>Anacamptis coverdalella</i>			2
<i>Arogalea cristifasciella</i>			1
<i>Chionodes discoocellella</i>			7
<i>Chionodes mediofuscella</i>			5
<i>Chionodes thoraceochrella</i>			2
<i>Chionodes unidentified species</i>			1
<i>Dichomeris caia</i>			1
<i>Dichomeris kimballi</i>			2
<i>Dichomeris laetitia</i>			2
<i>Dichomeris ligulella</i>	1		1
<i>Dichomeris offula</i>			3
<i>Dichomeris ventrella</i>			1
<i>Fascista cercerisella</i>			2
<i>Helcystogramma hystricella</i>			3
<i>Helcystogramma melanocarpa</i>			3
<i>Keiferia inconspicuell</i>			2
<i>Keiferia unidentified species</i>			3
<i>Monochroa unidentified species</i>			1
<i>Pseudotelphusa quercinigracella</i>			1
<i>Taygete attributella</i>			1
<i>Taygete gallaegenitella</i>			1
Glyphidoceridae			
<i>Glyphidocera democratica</i>			2
<i>Glyphidocera juniperella</i>			3
<i>Glyphidocera lactiflosella</i>			1
Gracillariidae			
<i>Caloptilia coroniella</i>			1
<i>Caloptilia hypericella</i>			1
<i>Caloptilia negundella</i>			3
<i>Caloptilia ostryaeella</i>	1		
<i>Caloptilia stigmatella</i>			1
<i>Caloptilia unidentified species</i>			6
<i>Caloptilia violacella</i>			1
<i>Cameraria aesculisella</i>			1
<i>Cameraria caryaefoliella</i>	2		6
<i>Cameraria corylisella</i>			6

Micro-moths	Number of Dates of Observation		
	Hollow Rock Nature Park	Mud Creek Bottomlands	New Hope Bottomlands
<i>Cameraria guttifinitella</i>	2		4
<i>Cameraria hamadryadella</i>			1
<i>Cameraria obstructella</i>	1		1
<i>Cameraria ostryarella</i>	5		
<i>Cameraria saccharella</i>			1
<i>Cameraria ulmella</i>			1
<i>Cameraria unidentified species</i>	4		11
<i>Cremastobombycia solidaginis</i>			1
<i>Cremastobombycia unidentified species</i>			6
<i>Leucospilapteryx venustella</i>			1
<i>Marmara fraxinicola</i>			2
<i>Marmara smilacisella</i>			1
<i>Marmara unidentified species</i>			14
<i>Micrurapteryx salicifoliella</i>			3
<i>Parectopa lespedezaefoliella</i>	1		2
<i>Parectopa plantaginisella</i>	2		
<i>Parectopa robiniella</i>	1		
<i>Parornix geminatella</i>	1		
<i>Parornix preciosella</i>	1		
<i>Parornix unidentified species</i>	1		1
<i>Phyllocnistis ampelopsiella</i>	2		
<i>Phyllocnistis liquidambarisella</i>			3
<i>Phyllocnistis liriodendronella</i>	1		1
<i>Phyllocnistis vitegenella</i>	1		2
<i>Phyllocnistis vitifoliella</i>	2		
<i>Phyllonorycter aeriferella</i>			3
<i>Phyllonorycter celtifoliella</i>			6
<i>Phyllonorycter celtisella</i>			1
<i>Phyllonorycter lucidicostella</i>			1
<i>Phyllonorycter obscuricostella</i>	2		
<i>Phyllonorycter ostryaefoliella</i>	2		
<i>Phyllonorycter trinotella</i>			1
<i>Phyllonorycter unidentified species</i>	3		4
<i>Porphyrosela desmodiella</i>			1
<i>Porphyrosela minuta</i>	1		1
Heliozelidae			
<i>Antispila cornifoliella</i>			1
<i>Antispila nysaefoliella</i>			1

Micro-moths	Number of Dates of Observation		
	Hollow Rock Nature Park	Mud Creek Bottomlands	New Hope Bottomlands
<i>Antispila unidentified species</i>	1		2
<i>Coptodisca lucifluella</i>	1		2
<i>Coptodisca ostryaefoliella</i>	3		
<i>Coptodisca saliciella</i>			2
<i>Coptodisca unidentified species</i>			1
Lecithoceridae			
<i>Martyringa latipennis</i>			1
Limacodidae			
<i>Adoneta spinuloides</i>			1
<i>Lithacodes fasciola</i>			2
<i>Natada nasoni</i>			1
Lyonetiidae			
<i>Paraleucoptera albella</i>			1
<i>Proleucoptera smilaciella</i>			1
Megalopygidae			
<i>Lagoa crispata</i>			2
Momphidae			
<i>Mompha unidentified species</i>	1		
Nepticulidae			
<i>Ectoedemia nyssaefoliella</i>	3		1
<i>Ectoedemia platanella</i>			1
<i>Ectoedemia rubifoliella</i>	1		1
<i>Ectoedemia trinotata</i>			1
<i>Ectoedemia ulmella</i>			2
<i>Ectoedemia unidentified species</i>			1
<i>Glaucolepis saccharella</i>	1		2
<i>Stigmella apicalbella</i>	1		1
<i>Stigmella caryaefoliella</i>	1		3
<i>Stigmella fuscotibiella</i>			1
<i>Stigmella intermedia</i>			1
<i>Stigmella prunifoliella</i>	2		
<i>Stigmella rhoifoliella</i>			2
<i>Stigmella rosaefoliella</i>			1
<i>Stigmella unidentified species</i>	4		6
Oecophoridae			
<i>Epicallima argenticinctella</i>			1
<i>Idioglossa miraculosa</i>			2
<i>Inga sparsiciliella</i>			1

Micro-moths	Number of Dates of Observation		
	Hollow Rock Nature Park	Mud Creek Bottomlands	New Hope Bottomlands
<i>Promalactis suzukiella</i>			3
Peleopodidae			
<i>Autosticha kyotensis</i>			1
Psychidae			
<i>Psychidae unidentified species</i>	2		
Pyralidae			
<i>Acrobasis caryae</i>			1
<i>Aglossa caprealis</i>			1
<i>Aglossa disciferalis</i>			1
<i>Arta olivalis</i>			2
<i>Arta statalis</i>			2
<i>Clydonopteron sacculana</i>			1
<i>Condylolomia participialis</i>			1
<i>Epipaschia superatalis</i>			1
<i>Eulogia ochrifrontella</i>			3
<i>Euzophera ostricolorella</i>			1
<i>Galasa nigrinodis</i>			1
<i>Glyptocera consobrinella</i>			1
<i>Hypsopygia binodulalis</i>			1
<i>Hypsopygia olinalis</i>			2
<i>Macrorrhinia endonephele</i>			2
<i>Moodna ostrinella</i>			1
<i>Omphalocera cariosa</i>			1
<i>Phycitinae unidentified species</i>			2
<i>Phycitodes reliquella</i>			2
<i>Pococera asperatella</i>			1
<i>Pococera melanogrammos</i>			1
<i>Sciota celtidella</i>			3
<i>Sciota uvinella</i>			2
<i>Tosale oviplagalis</i>			1
<i>Vitula edmandsii</i>			1
Tineidae			
<i>Acrolophus mycetophagus</i>			2
<i>Acrolophus panamae</i>			3
<i>Acrolophus piger</i>			1
<i>Acrolophus plumifrontella</i>			1
<i>Acrolophus popeanella</i>			2
<i>Acrolophus propinqua</i>			2

Micro-moths	Number of Dates of Observation		
	Hollow Rock Nature Park	Mud Creek Bottomlands	New Hope Bottomlands
<i>Homostinea curviliniella</i>			2
<i>Mea bipunctella</i>			3
<i>Monopis longella</i>			1
<i>Scardia amurensis</i>			1
<i>Tinea apicimaculella</i>			1
Tischeriidae			
<i>Astrotischeria solidagonifoliella</i>			3
<i>Coptotriche aenea</i>	1		5
<i>Coptotriche badiella</i>	3		
<i>Coptotriche castaneaeella</i>	1		1
<i>Coptotriche purinosella</i>			1
<i>Coptotriche unidentified species</i>	3		5
<i>Tischeria quercitella</i>			1
Tortricidae			
<i>Acleris semipurpurana</i>			2
<i>Acleris viburnana</i>			5
<i>Aethes new species 5</i>			1
<i>Aethes new species 6</i>			1
<i>Aethes seriatana</i>			1
<i>Aethes unidentified species</i>			3
<i>Ancylis comptana</i>			4
<i>Ancylis laciniana</i>			2
<i>Ancylis semiovana</i>			1
<i>Ancylis unidentified species</i>			2
<i>Argyrotaenia velutinana</i>			2
<i>Bactra verutana</i>			1
<i>Choristoneura parallela</i>			3
<i>Choristoneura rosaceana</i>			2
<i>Clepsia peritana</i>			3
<i>Coelostathma discopunctana</i>	1		3
<i>Corticivora clarki</i>			1
<i>Cydia caryana</i>			1
<i>Cydia latiferreana</i>			1
<i>Ecdytoplopha mana</i>			1
<i>Endothenia hebesana</i>			1
<i>Epiblema abruptana</i>			2
<i>Epiblema otiosana</i>			1
<i>Epiblema strenuana</i>			1

Micro-moths	Number of Dates of Observation		
	Hollow Rock Nature Park	Mud Creek Bottomlands	New Hope Bottomlands
<i>Epiblema strenuana_ abruptana complex</i>			1
<i>Episimus tyrius</i>			1
<i>Eugnosta sartana</i>			1
<i>Grapholita packardi</i>			1
<i>Gretchena bolliana</i>			2
<i>Olethreutes concinnana</i>			1
<i>Olethreutes corylana</i>	1		
<i>Olethreutes fasciatana</i>		1	1
<i>Olethreutes new species near permundana</i>			2
<i>Olethreutes permundana</i>			3
<i>Olethreutes unidentified species</i>			2
<i>Paralobesia liriodendrana</i>	1		
<i>Pelochrista derelicta</i>			1
<i>Platynota idaeusalis</i>			2
<i>Pseudexentera sepia</i>			1
<i>Pseudogalleria inimicella</i>			1
<i>Rhopobota finitimana</i>			3
<i>Strepsicrates smithiana</i>			1
<i>Zomaria interruptolineana</i>			1
Unassigned Apoditrysia			
<i>Cycloplasis panicifoliella</i>	2		1
Yponomeutidae			
<i>Atteva aurea</i>			2
<i>Yponomeuta multipunctella</i>			2
Grand Total	75	3	513

Appendix 13. Summary of Bee Observations

Species	Number of Individuals	
	New Hope Bottomlands	Hollow Rock Park
<i>Andrena cressonii</i>	2	
<i>Andrena erigeniae</i>	31	18
<i>Andrena macra</i>	0	1
<i>Andrena nasonii</i>	0	3
<i>Andrena violae</i>	4	3
<i>Andrena sp.</i>	2	
<i>Panurginus potentillae</i>	1	
<i>Augochlora pura</i>	1	
<i>Augochlorella aurata</i>	3	
<i>Lasioglossum fuscipenne</i>	0	1
<i>Lasioglossum bruneri</i>	3	3
<i>Lasioglossum callidum</i>	0	1
<i>Lasioglossum cressonii</i>	2	11
<i>Lasioglossum imitatum</i>	6	
<i>Lasioglossum oblongum</i>	2	
<i>Lasioglossum weemsi</i>	2	
<i>Lasioglossum sp.</i>	1	
<i>Coelioxys octodentata</i>	1	
<i>Coelioxys sayi</i>	1	
<i>Megachile exilis</i>	1	
<i>Megachile mendica</i>	6	1
<i>Megachile xylocopoides</i>	1	1
<i>Megachile sp.</i>	2	
<i>Osmia atriventris</i>	12	13
<i>Osmia georgica</i>	2	
<i>Osmia lignaria</i>	0	4
<i>Osmia pumila</i>	8	11
<i>Osmia sandhouseae</i>	1	
<i>Osmia taurus</i>	7	6
<i>Osmia sp.</i>	4	
<i>Apis mellifera</i>	32	3
<i>Bombus bimaculatus</i>	0	2
<i>Bombus griseocolis</i>	2	
<i>Bombus impatiens</i>	39	

Species	Number of Individuals	
	New Hope Bottomlands	Hollow Rock Park
<i>Ceratina calcarata</i>	1	
<i>Ceratina dupla</i>	2	
<i>Ceratina strenua</i>	1	
<i>Eucera atriventris</i>	1	
<i>Habropoda laboriosa</i>	1	
<i>Melissodes comptoides</i>	1	
<i>Melissodes trinodis</i>	2	
<i>Nomada imbricata/luteoloides</i>	3	3
<i>Nomada pygmaea</i>	3	3
<i>Nomada</i> sp.	2	
<i>Ptilothrix bombiformis</i>	2	
<i>Stelis louisae</i>	1	
<i>Xylocopa virginica</i>	14	

Appendix 14. Summary of Vertebrate Observations

Vertebrates	Number of Dates of Observation					
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands	Old Chapel Hill Road Park
MAMMALS						
a Short-tailed Shrew	2					
American Beaver	3	5		12	3	
American Mink		3		4	2	
Bobcat				1		
Common Muskrat		1		6	3	
Common Raccoon	1	4		18	3	
Coyote		1		19		
Domestic Cat				1		
Domestic Dog	1			8	2	
Eastern Chipmunk				1		
Eastern Cottontail	2	1	1	9	2	
Eastern Gray Squirrel	3	3		19	2	
Eastern Mole	1			9		
Fox unidentified species				1		
Golden Mouse				1		
Gray Fox		3		2		
Hispid Cotton Rat				1		
North American River Otter	1	1		9	2	
Red Fox		1		2		
Southern Flying Squirrel				2		
Virginia Opossum	1	3		12		
White-tailed Deer	1	6		19	4	
Woodchuck				1		
BIRDS						
Acadian Flycatcher	10	4		12	1	
American Crow	10	2		14	2	
American Goldfinch	14	2		20	3	
American Kestrel	2					
American Redstart	2			3		
American Robin	13	2		10	1	1
American Woodcock		2				
Bald Eagle				2		
Barn Swallow				1		
Barred Owl	9			11		
Belted Kingfisher	7	1		4		
Black Vulture	4			4		
Black-and-white Warbler	2			3		
Blackburnian Warbler, migrant				1		
Black-throated Blue Warbler				3		
Blue Grosbeak	3			2		
Blue Jay	17	5		18	3	
Blue-gray Gnatcatcher	15	2		20	4	
Blue-headed Vireo				2		
Brown Creeper, winter	3			2		
Brown Thrasher	3			4		1
Brown-headed Cowbird	7	1		9	1	1
Brown-headed Nuthatch	16			14		
Canada Goose	2			8		
Cape May Warbler	1					
Carolina Chickadee	39	4		27	6	
Carolina Wren	40	7		34	5	
Cedar Waxwing	1	1		3		
Chimney Swift	2				1	
Chipping Sparrow	7			4		1

Vertebrates	Number of Dates of Observation					
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands	Old Chapel Hill Road Park
Common Grackle	2			12	2	1
Common Yellowthroat		1		6		
Cooper's Hawk	1			2		1
Dark-eyed Junco, winter	2	1		3		1
Downy Woodpecker	38	4		33	2	
Eastern Bluebird	18			6		1
Eastern Phoebe	17			12		
Eastern Towhee	4	2		10	1	
Eastern Wood-Pewee	8			2		
European Starling				3		1
Evening Grosbeak					3	
Field Sparrow	1					
Fish Crow	4	2		4		1
Golden-crowned Kinglet, winter	12	1		7	1	
Gray Catbird	1			5		
Great Blue Heron	13	2		9		
Great Crested Flycatcher	5			9		
Great Horned Owl	2				1	
Green Heron	2					
Hairy Woodpecker	12	3		15	3	
Hermit Thrush, winter	3			7	1	
Hooded Merganser	4					
Hooded Warbler	1	1		2	2	
House Finch	5			5		1
House Wren		1		1		
Indigo Bunting	6	3		12		
Kentucky Warbler	2				1	
Killdeer				4		
Louisiana Waterthrush	14	1		1	2	
Magnolia Warbler, migrant	1					
Mallard	8					
Mourning Dove	16			4		
Northern Cardinal	29	5		32	6	
Northern Flicker	10	2		13	1	
Northern Mockingbird	2			5		
Northern Parula	13	2		19	2	
Northern Rough-winged Swallow				2		
Northern Waterthrush				3		
Osprey	2					
Ovenbird	1			2	2	
Pileated Woodpecker	14			17	1	
Pine Warbler	17			19	3	
Prothonotary Warbler				1		
Purple Martin	3			1		
Red-bellied Woodpecker	30	4		31	2	
Red-eyed Vireo	18	4		17	1	
Red-headed Woodpecker	25	1		24		
Red-shouldered Hawk	17	3		20	5	
Red-tailed Hawk	2	2		4		1
Red-winged Blackbird				1		
Ring-billed Gull				1		
Rock Pigeon	2					
Ruby-crowned Kinglet, winter	13			12	4	
Ruby-throated Hummingbird	2	1		9		
Rusty Blackbird				2		
Scarlet Tanager	5			2	1	
Sharp-shinned Hawk				1		1
Song Sparrow	9	1		12		

Vertebrates	Number of Dates of Observation					
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands	Old Chapel Hill Road Park
Summer Tanager	11	2		19	1	
Swamp Sparrow		1		2		
Tufted Titmouse	35	4		30	3	
Turkey Vulture	8			5		
Veery, migrant				1		
White-breasted Nuthatch	20	5		24	3	
White-eyed Vireo	5	2		8	1	
White-throated Sparrow	11	1		16	1	
Wild Turkey	2			10		
Winter Wren, winter	3	1		9		
Wood Duck	2	1		5	1	
Wood Thrush	1	1		3	2	
Worm-eating Warbler				1		
Yellow-bellied Sapsucker, winter	18	1		5		
Yellow-billed Cuckoo	4	1		6	1	
Yellow-crowned Night-Heron				2		
Yellow-rumped Warbler, winter	8	1		9	2	
Yellow-throated Vireo				1	1	
Yellow-throated Warbler	4			3	1	
LIZARDS						
Common Five-lined Skink	1	1		1		
Eastern Fence Lizard	1					
Green Anole				3		
SNAKES						
Common Watersnake	1					
Copperhead	1					
Dekay's Brownsnake	1			1		
Eastern Ratsnake	2			1		
North American Racer		1			1	
Plain-bellied Watersnake				2		
Red-bellied Snake	1					
Ring-necked Snake				2		
Rough Greensnake	1					
TURTLES						
Eastern Box Turtle		1		3	3	
Eastern Musk Turtle		1				
Pond Slider	1			3		
River Cooter	1			1		
Snapping Turtle		1				
SALAMANDERS						
Dwarf Waterdog	2					
Four-toed Salamander					1	
Marbled Salamander		2		7	1	
Southern Two-lined Salamander	2	2				
Spotted Salamander		1				
White-spotted Slimy Salamander					1	
ANURANS						
American Bullfrog						1
American Toad	4				1	
Cope's Gray Treefrog	1	1		15	2	
Eastern Cricket Frog				1		
Eastern Narrow-mouthed Toad				4		
Fowler's Toad	5	1				
Green Frog		2		8	2	
Green Treefrog		1		14		
Southern Leopard Frog	4	2		2		
Spring Peeper	2	3		1	1	
Upland Chorus Frog	5	2		8	2	

Vertebrates	Number of Dates of Observation					
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands	Old Chapel Hill Road Park
FISH						
American Eel	1					
Black Crappie	2					
Bluegill	5			1		
Bluehead Chub	1					
Chain Pickerel	4			1		
Channel Catfish				1		
Coastal Shiner				1		
Common Carp				1		
Creek Chub	1					
Eastern Creek Chubsucker	5					
Eastern Mosquitofish				6		
Flat Bullhead				1		
Flier	3			1		
Golden Shiner	1					
Green Sunfish	1			2		
Highfin Shiner	1	1		1		
Largemouth Bass	6			1		
Margined Madtom	6			2		
Notchlip Redhorse	5			1		
Piedmont Darter	1					
Pirate Perch	7	1				
Pumpkinseed	4			1		
Redbreast Sunfish	6	1		1		
Redear Sunfish	1					
Redfin Pickerel	3					
Rosyside Dace	1					
Sandbar Shiner	1					
Satinfin Shiner	1	1		1		
Sawcheek Darter	1					
Snail Bullhead	1			1		
Speckled Killifish	3			1		
Spottail Shiner	1					
Swallowtail Shiner	1					
Tessellated Darter	1			1		
Warmouth				1		
White Catfish				1		
White Shiner	1			1		
Whitefin Shiner				1		
Whitemouth Shiner	1	1		1		
Yellow Perch				1		
Grand Total	892	160	1	1070	129	14

Appendix 15. Summary of Other Animal Taxa Observations

Non-target Taxa	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
TARDIGRADES					
<i>Echiniscus unidentified species</i>				1	
<i>Echiniscus virginicus</i>				1	
<i>Minibiotus jonesorum</i>				1	
<i>Ramazzottius baumanni</i>				1	
TRUE BUGS					
<i>Acanthocephala declivis</i>	1				
<i>Acanthocephala terminalis</i>	1			1	
<i>Lopidea new species cf. instabilis</i>	1				
<i>Lygus unidentified species</i>	1				
<i>Mormidea lugens</i>	2				
<i>Pselliopus barberi</i>	1				
<i>Taylorilygus apicalis</i>	1				
HEMIPTERAN HOPPERS					
<i>Acanalonia bivittata</i>				2	
<i>Acutalis tartarea</i>	1				
<i>Balclutha unidentified species</i>	1				
<i>Chionomus puellus</i>	1				
<i>Chlorotettix unidentified species</i>				1	
<i>Draeculacephala bradleyi</i>	1				
<i>Draeculacephala unidentified species</i>	1				
<i>Empoascini unidentified species</i>				1	
<i>Erasmoneura atra or nigra</i>				1	
<i>Flatormenis proxima</i>				1	
<i>Flexamia unidentified species</i>	1				
<i>Graminella nigrifrons</i>	2				
<i>Graminella villica</i>	2				
<i>Graphocephala unidentified species</i>				1	
<i>Graphocephala versuta</i>	4			4	
<i>Gyponana unidentified species</i>				2	
<i>Homalodisca vitripennis</i>	1			1	
<i>Jikradia olitoria</i>	2			1	
<i>Laevicephalus unidentified species</i>	1				
<i>Lepyronia quadrangularis</i>				4	
<i>Liburniella ornata</i>	2				
<i>Melanoliarus placitus</i>				1	

Non-target Taxa	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Metcalfa pruinosa</i>				1	
<i>Oncometopia orbona</i>				2	
<i>Ormenoides venusta</i>				1	
<i>Planicephalus flavicosta flavocostatus complex</i>	1				
<i>Plesiommata tripunctata</i>	1				
<i>Polyamia weedi</i>	1				
<i>Prosapia bicincta</i>	2			1	
<i>Scaphoideus immistus</i>				1	
<i>Scaphytopius rubellus</i>	1				
<i>Sibovia occatoria</i>	2			3	
<i>Spissistilus festinus</i>	1				
<i>Stenocranus lautus</i>				1	
<i>Stictocephala brevitylus</i>				2	
<i>Tylozygus bifidus</i>	1				
BUPRESTID BEETLES					
<i>Agrilus planipennis</i>				1	
<i>Pachyschellus unidentified species</i>				3	
FIREFLIES					
<i>Photinus australis</i>	1				
<i>Photinus consimilis</i>	1				
<i>Photuris lucicrescens</i>	1				
LEAF BEETLES					
<i>Kuschelina miniata species complex</i>	1				
<i>Odontota scapularis</i>				1	
<i>Trirhabda baccharidis</i>				1	
LEAF-MINING BEETLES					
<i>Brachys ovatus</i>				2	
<i>Brachys unidentified species</i>				5	
<i>Octotoma plicatula</i>				3	
<i>Taphrocerus unidentified species</i>				2	
LONGHORN BEETLES					
<i>Mallodon dasystemus</i>				1	
<i>Strangalia bicolor</i>				1	
<i>Tetraopes melanurus</i>				1	
<i>Typocerus velutinus</i>				1	
ROVE BEETLES					
<i>Stenus unidentified species</i>	1				
SCARAB BEETLES					
<i>Cotinis nitida</i>	1				

Non-target Taxa	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Popillia japonica</i>	1				
STAG BEETLES					
<i>Lucanus capreolus</i>				2	
TIGER BEETLES					
<i>Cicindela sexguttata</i>	4			8	
WEEVILS					
<i>Orchestomerus eisemani</i>	1			1	
NEUROPTERA					
<i>Myrmeleon unidentified species</i>	1				
MECOPTERA					
<i>Panorpa unidentified species</i>	1				
BEE FLIES					
<i>Bombylius major</i>	2				
FLOWER FLIES					
<i>Ocyrtamus fuscipennis</i>				1	
<i>Syrphus torvus</i>	1				
<i>Toxomerus geminatus</i>	1			1	
FRUIT FLIES					
<i>Zonosemata electa</i>	1				
GALL MIDGES					
<i>Acericecis ocellaris</i>				2	
<i>Asteromyia unidentified species</i>				1	
<i>Dasineura pudibunda</i>				1	
HORSE FLIES					
<i>Tabanus atratus</i>				1	
LEAF-MINING FLIES					
<i>Agromyza aristata</i>				1	
<i>Agromyza parca</i>				1	
<i>Agromyza unidentified species</i>	1			5	
<i>Agromyza vockerothi</i>	1			1	
<i>Agromyzidae unidentified species</i>	1			2	
<i>Aulagromyza unidentified species</i>	1				
<i>Calycomyza avira</i>				3	
<i>Calycomyza humeralis</i>				2	
<i>Calycomyza novascotiensis</i>				1	
<i>Calycomyza solidaginis</i>				1	
<i>Calycomyza unidentified species</i>				2	
<i>Cerodontha angularis</i>	1				
<i>Cerodontha dorsalis</i>	2			1	

Non-target Taxa	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
<i>Cerodontha unidentified species</i>				4	
<i>Euleia fratria</i>				2	
<i>Liriomyza blechi</i>				1	
<i>Liriomyza fricki</i>	2			1	
<i>Liriomyza galiivora</i>	2			3	
<i>Liriomyza helianthi</i>				1	
<i>Liriomyza unidentified species</i>				14	
<i>Nemorimyza maculosa</i>				1	
<i>Nemorimyza posticata</i>				7	
<i>Ophiomyia kwansonis</i>	1				
<i>Ophiomyia parda</i>				2	
<i>Ophiomyia unidentified species</i>				2	
<i>Pegomya bicolor</i>				1	
<i>Phytoliriomyza melampyga</i>				2	
<i>Phytoliriomyza violivora</i>				2	
<i>Phytomyza aesculi</i>				1	
<i>Phytomyza crassiseta</i>	1				
<i>Phytomyza ditmani</i>				1	
<i>Phytomyza illicicola</i>				1	
<i>Phytomyza loewii</i>				1	
<i>Phytomyza opacae</i>				1	
<i>Phytomyza sempervirentis</i>				1	
<i>Phytomyza unidentified species</i>				2	
MARCH FLIES					
<i>Dilophus unidentified species</i>	1				
PICTURE-WINGED FLIES					
<i>Delphinia picta</i>	1				
ROBBER FLIES					
<i>Laphyria n. sp. near macquarti</i>				1	
<i>Ommatius unidentified species</i>	1				
<i>Promachus rufipes</i>	1		1		
SNIPE FLIES					
<i>Chrysopilus thoracicus</i>	1				
SAWFLIES					
<i>Metalus rohweri</i>	1				
<i>Nefusa ambigua</i>	1				
<i>Tethida barda</i>	1				
GALL WASPS					
<i>Diastrophus nebulosus</i>				1	

Non-target Taxa	Number of Dates of Observation				
	Hollow Rock Nature Park	Mt. Moriah Bottomlands	Mud Creek Bottomlands	New Hope Bottomlands	Old Chapel Hill Road Bottomlands
ACULEATE WASPS					
<i>Dolichovespula maculata</i>	1				
<i>Entypus fulvicornis</i>				3	
<i>Eremnophila aureonotata</i>	2				
<i>Eumenes fraternus</i>	1				
<i>Euodynerus schwarzi</i>	1				
<i>Polistes unidentified species</i>	1				
<i>Sphecius speciosus</i>				1	
<i>Vespula maculifrons</i>				1	
ANTS					
<i>Formica unidentified species</i>	1				
CRAYFISH					
<i>Cambarus latimanus</i>				1	
LAND SNAILS					
<i>Anguispira alternata</i>				2	
<i>Haplotrema concavum</i>		1		3	
<i>Limax maximus</i>	1				
<i>Mesodon thyroidus</i>	1				1
<i>Neohelix unidentified species</i>	1				
<i>Philomycus carolinianus</i>	1	1			
<i>Triodopsis juxtidentis</i>				1	
<i>Ventridens unidentified species</i>				1	
<i>Vertigo unidentified species</i>	1				
LEECHES					
<i>Haemopsis septagon</i>				1	
Grand Total	60	2	1	132	1