

**Species List for the 1<sup>st</sup> Ever BRMNAP BioBlitz – Held on Sunday, April 28<sup>th</sup> 2019  
(Survey window was from 7am – 11pm)**

This BioBlitz was a collaborative effort organized by the **Virginia Outdoors Foundation (VOF)**, the **Bull Run Mountains Conservancy (BRMC)** and **The Clifton Institute**. It was held within the Jackson Hollow Section of the **Virginia Outdoors Foundation's Bull Run Mountains Natural Area Preserve (VOF-BRMNAP)**. The volunteer subject matter experts included: Michael Lott (DCR-DNH), Janis Stone (PATC and VNPS), Valerie Huelsman (PWC), Thomas Roehl (MAW), Carter Nevill (Mayor of Warrenton and fungi enthusiast), and Dr. Jonathon Kolby (Nat Geo explorer). Complete list of BioBlitz participants (that were not already mentioned): Joseph Villari (VOF), Summers Cleary (VOF), Leslie Grayson (VOF), Tyler McGilvery (VOF), Callie Broaddus (BRMC), David Roos (BRMC), Bert Harris (Clifton Institute), Eleanor Harris (Clifton Institute), Allen Dupre, Brock Hudson, Theo Grayson, Monica Wotell, Lisa Richard, Sarah Causey, Michael Barreda, Matthew Cicanese, Lisa Matthews and Bruce Matthews.



**Total of organisms that were identified to the species level:  
226**

**Bird list:**

1. Mourning Dove (*Zenaida macroura*)
2. Turkey Vulture (*Cathartes aura*)
3. Red-bellied Woodpecker (*Melanerpes carolinus*)
4. Downy Woodpecker (*Picoides pubescens*)
5. Hairy Woodpecker (*Leuconotopicus villosus*)
6. Pileated Woodpecker (*Dryocopus pileatus*)
7. Northern Flicker (*Colaptes auratus*)
8. Eastern Phoebe (*Sayornis phoebe*)
9. Great Crested Flycatcher (*Myiarchus crinitus*)
10. Yellow-throated Vireo (*Vireo flavifrons*)
11. Blue-headed Vireo (*Vireo solitarius*)
12. Red-eyed Vireo (*vireo olivaceus*)
13. Blue Jay (*Cyanocitta cristata*)
14. Carolina Chickadee (*Peocile carolinesis*)
15. Tufted Titmouse (*Baeolophus bicolor*)
16. White-breasted Nuthatch (*Sitta carolinensis*)
17. House Wren (*Troglodytes aedon*)
18. Carolina Wren (*Thryothorus ludovicianus*)

19. Blue-gray Gnatcatcher (*Poliophtila caerulea*)
20. Eastern Bluebird (*Sialia sialis*)
21. Wood Thrush (*Hylocichla mustelina*)
22. American Robin (*Turdus migratorius*)
23. Gray Catbird (*Dumetella carolinensis*)
24. American Goldfinch (*Spinus tristis*)
25. White-throated Sparrow (*Zonotrichia albicollis*)
26. Eastern Towhee (*Pipilo erythrophthalmus*)
27. Baltimore Oriole (*Icterus galbula*)
28. Brown-headed Cowbird (*Molothrus ater*)
29. Ovenbird (*Seiurus aurocapilla*)
30. Worm-eating Warbler (*Helmitheros vermivorum*)
31. Louisiana Waterthrush (*Parkesia motacilla*)
32. Black-and-white Warbler (*Mniotilta varia*)
33. Northern Parula (*Setophaga americana*)
34. Black-throated Blue Warbler (*Setophaga caerulescens*)
35. Black-throated Green Warbler (*Setophaga virens*)
36. Northern Cardinal (*Cardinalis cardinalis*)
37. Raven (*Corvus corax*)
38. Whip-poor-will (*Caprimulgus vociferus*)

**Count of birds identified to a species level: 38**

#### **Amphibian/reptile list:**

1. Red-spotted newt (*Notophthalmus viridescens viridescens* – observed in both the newt and red eft life stage)
2. White-spotted slimy salamander (*Plethodon cylindraceus*)
3. Eastern Red-backed salamander (*Plethodon cinereus*)
4. Long-tailed Salamander (*Eurycea longicauda*)
5. American bullfrog (*Lithobates catesbeianus*)
6. Eastern American Toad (*Anaxyrus americanus americanus*)
7. Pickerel frog (*Lithobates palustris*)
8. Leopard frog (*Lithobates pipiens*)
9. Eastern worm snake (*Carphophis amoenus*)
10. Smooth earth snake (*Virginia valeriae*)
11. Ring-necked snake (*Diadophis punctatus*)
12. Eastern fence lizard (*Sceloporus undulatus*)
13. Common five-lined skink (*Plestiodon fasciatus*)
14. Common box turtle (*Terrapene carolina*)
15. Garter Snake (Genus *Thamnophis*)\*

**Count of amphibians and reptiles identified to a species level: 14**

#### **Fish list:**

1. Brook trout (*Salvelinus fontinalis*)

**Count of fish identified to a species level: 1**

## Arthropod/invertebrate list:

### Non-arthropodal Invertebrates

1. Common earthworm (*Lumbricus terrestris*)
2. Leopard slug (*Limax maximus*)
3. Unidentified aquatic earthworm (Subclass Oligochaeta)\*

### Spiders

4. Orchard orbweaver (*Leucauge venusta*)
5. Filmly dome spider (*Neriene radiata*)
6. Wolf spider (Possibly *Schizocosa ocreata*) – very abundant!
7. Rabid wolf spider (Possibly *Rabidosa rabida*)
8. White-banded fishing spider (*Dolomedes albineus*)
9. Dark fishing spider (*Dolomedes tenebrosus*)
10. Flea Jumping Spider (*Naphrys pulex*)
11. Crab spider (Family Thomisidae)\*
12. Lynx spider (Genus *Oxyopes*)\*
13. Araneoid Spiders (Superfamily *Araneoidea*)\*
14. Harvestmen Spider (Genus *Vonones*)\*

### Lepidoptera (Butterflies and moths)

15. Eastern tiger swallowtail (*Papilio glaucus*)
16. Juvenal's duskywing (*Erynnis juvenalis*)
17. Canadian Melanolophia moth (*Melanolophia canadaria*)
18. Eastern tailed-blue (*Cupido Comyntas*)
19. Common roadside skipper (*Amblyscirtes vialis*)
20. Skippers (Family Hesperidae)\*
21. Eastern shieldback (Genus *Atlanticus*)\*

### Odonata (Dragonflies and damselflies)

22. Stream Cruiser (*Didymops transversa*)
23. Ashy Clubtail (*Phanogomphus lividus*)
24. Twin-spotted Spiketail (*Cordulegaster maculata*)
25. Common Baskettail (*Epithea cynosura*)
26. Springtime Darner (*Basiaeschna janata*)
27. Common Green Darner (*Anax junius*)
28. Painted Skimmer (*Libellula semifasciata*)
29. Common Whitetail (*Plathemis Lydia*)
30. Lancet Clubtail (*Phanogomphus exilis*)
31. Clubtail (Genus Gomphidae)\*
32. Visual ID of a possible Cyrano Darner\*

### Other arthropods and invertebrates

33. Hebard's trig (*Falcicula hebardii*)
34. Common Rough Woodlouse (*Porcellio scaber*)
35. Stitched ground beetle (*Carabus vinctus*)
36. Buffalo treehopper (*Stictocephala alta*)
37. Scarlet-bordered assassin bug (*Rhiginia cruciata*)
38. Flat-backed millipede (*Pseudopolydesmus serratus*)

39. Chestnut carpenter ant (*Camponotus castaneus*)
40. Eastern black carpenter ant (*Camponotus pennsylvanicus*)
41. Six-spotted tiger beetle (*Cicindela sexguttata*)
42. Mosquito larvae (Probably *Culex erraticus*)
43. Flat-backed Millipede (*Euryurus leachii*)
44. Green Stink Bug (*Chinavia hilaris*)
45. Eastern Subterranean Termite (*Reticulitermes flavipes*)
46. Tennessee Collared Ant (*Aphaenogaster tennesseensis*)
47. Stitched ground beetle (*Carabus vinctus*)
48. Spotted Camel Cricket (*Ceuthophilus maculatus*)
49. Muscoid Flies (Superfamily Muscoidea)\*
50. Predaceous diving beetles (Family *Dytiscidae*)\*
51. Eastern Shieldbacks (Genus *Atlanticus*)\*
52. Stream Mayflies (Family Heptageniidae)\*
53. Gall Wasps (Family *Cynipidae*)\*
54. Click Beetles (Family *Elateridae*)\*
55. Typical Leafhoppers (Family *Cicadellidae*)\*
56. Water Striders (Family *Gerridae*)\*
57. Red mite (Genus *Trombidium*)\*
58. True Velvet Mites (Family *Trombidiidae*)\*
59. Flat-headed mayfly (Family Heptageniidae)\*
60. Other unidentified mayfly (Order Ephemeroptera)\*
61. Centipede (Class Chilopoda)\*
62. Millipede (Class Diplopoda)\*
63. Muscoid fly (Superfamily Muscoidea)\*
64. Notched-mouthed ground beetle (Genus *Dicaelus*)\*
65. Sugar Ants (Genus *Camponotus*)\*
66. Ants (Family *Formicidae*)\*
67. Acrobat ants (Genus *Crematogaster*)\*
68. Unidentified bee (Epifamily Anthophila)\*
69. Stoneflies (Order Plecoptera)\*
70. Beetles (Order Coleoptera)\*
71. Mosquitoes (Family *Culicidae*)\*
72. Unidentified Gastropod (Class Gastropoda)\*
73. Cockroach (Order Blattodea)\*
74. Termites (Order Blattodea, Epifamily Termitoidae)\*

**Count of arthropods/invertebrates identified to a species level: 39**

#### **Fungi and Lichen list:**

1. Zombifying fungus (Arthropaga myriapodina) - Arguably our coolest fungi spotting!
2. White morel (*Morchella americana*)
3. Black morel (*Morchella angusticeps*)
4. Swamp beacon (*Mitrula elegans*)
5. Deer mushroom (*Pluteus cervinus*)
6. Hexagonal-pored polypore (*Neofavolus alveolaris*)
7. Dryad's saddle (*Polyporus squamosus*)

8. Green wood cup (*Chlorociboria aeruginascens*)
9. Stump puffball (*Lycoperdon pyriforme*)
10. Gilled polypore (*Trametes betulina*)
11. Turkey tail (*Trametes versicolor*)
12. False turkey tail (*Stereum ostrea*)
13. Ceramic parchment (*Xylobolus frustulatus*)
14. Cobalt crust fungus (*Terana caerulea*)
15. Orange bramble rust (*Phragmidium bulbosum*)
16. Rosette lichen (*Physcia millegrana*)
17. Hypoxylon canker (*Biscogniauxia atropunctata*)
18. Chicken of the Woods (*Laetiporus sulphureus*)
19. Water Club Mushroom (*Vibrissea truncorum*)
20. Pine-pine Gall Rust (*Endocronartium harknessii*)
21. Rock Greenshield Lichen (*Flavoparmelia baltimorensis*)
22. Mealy Pixie Cup (*Cladonia chlorophaea*)
23. Scaly lentinus (*Neolentinus lepideus*)
24. Crowded parchment (*Stereum complicatum*)
25. Smokey-eyed boulder lichen (*Porpidia albocaerulescens*)
26. Violet-toothed polypore (*Trichaptum biforme*)
27. Shield lichen (*Parmelia sulcata*)
28. American Cancer-root (*Conopholis americana*)
29. Unknown Hypoxylon (Genus *Hypoxylon*)\*
30. Ruffle Lichens (Genus *Parmotrema*)\*
31. Cinnabar Polypores (Genus *Pycnoporus*)\*
32. Greenshield Lichens (Genus *Flavoparmelia*)\*
33. Xylariales (Order Xylariales)\*
34. Lecanorales (Order Lecanorales)\*
35. Basidiomycete Fungi (Phylum Basidiomycota)\*
36. Agaricomycetes (Class Agaricomycetes)\*
37. Sac fungi (Phylum Ascomycota)\*

**Count of fungi identified to a species level: 28**

#### **Plants and mosses list:**

##### **Native**

1. Beetleweed, or galax (*Galax urceolata*) – This species is ways outside of nearest known population. Gary Fleming has been contacted and is planning to investigate!
2. Pink Lady's Slipper (*Cypripedium acaule*)
3. Lowbush blueberry (*Vaccinium pallidum*)
4. Smooth alder (*Alnus serrulata*)
5. Black Willow (*Salix nigra*)
6. Chestnut Oak (*Quercus montana*)
7. Cut-leaved Toothwort (*Cardamine concatenate*)
8. Smooth hydrandea (*Hydrangea arborescens*)
9. Wild Yam (*Dioscorea villosa*)
10. Fourleaf yam (*Dioscorea quaternata*)
11. Pennywort (*Obolaria virginica*)

12. Black tupelo, or black gum (*Nyssa sylvatica*)
13. Bloodroot (*Sanguinaria canadensis*)
14. Ebony Spleenwort (*Asplenium platyneuron*)
15. Downy Rattlesnake Plantain (*Goodyera pubescens*)
16. Common Blue Violet (*Viola sororia*)
17. Seedbox (*Ludwigia alternifolia*)
18. Smooth solomon's seal (*Polygonatum biflorum*)
19. False Solomon's Seal (*Maianthemum racemosum*)
20. Common Cinquefoil (*Potentilla simplex*)
21. Pond Water-Starwort (*Callitriche stagnalis*)
22. Eastern Hemlock (*Tsuga canadensis*)
23. Pincushion moss (*Leucobryum glaucum*)
24. Northern Highbush Blueberry (*Vaccinium corymbosum*)
25. Deerberry (*Vaccinium stamineum*)
26. False Hellebore (*Veratrum viride*)
27. New York Fern (*Parathelypteris noveboracensis*)
28. Carpet Bugle (*Ajuga reptans*)
29. Parlin's Pussytoes (*Antennaria parlinii*)
30. Witchhazel (*Hamamelis virginiana*)
31. Green Ash (*Fraxinus pennsylvanica*)
32. White ash (*Fraxinus americana*)
33. Jack-in-the-Pulpit (*Arisaema triphyllum*)
34. Fox grape (*Vitis labrusca*)
35. Cat greenbrier (*Smilax glauca*)
36. White rattlesnake-root, or white lettuce (*Prenanthes alba*)
37. Wood-nettle (*Laportea canadensis*)
38. Virginia knotweed (*Persicaria virginiana*)
39. Spreading bellwort, or wild oats (*Uvularia sessilifolia*)
40. Perfoliate bellwort (*Uvularia perfoliata*)
41. Hay-scented fern (*Dennstaedtia punctilobula*)
42. Cinnamon Fern (*Osmunda cinnamomeum*)
43. Royal fern (*Osmunda regalis*)
44. Virginia Pine (*Pinus virginiana*)
45. Loblolly pine (*Pinus taeda*)
46. American hog-peanut (*Amphicarpaea bracteata*)
47. Common persimmon (*Diospyros virginiana*)
48. Canada Mayflower, or false lily-of-the-valley (*Maianthemum canadense*)
49. Sensitive Fern (*Onoclea sensibilis*)
50. Eastern Teaberry (*Gaultheria procumbens*)
51. Common Serviceberry (*Amelanchier arborea*)
52. Southern Arrowwood (*Viburnum dentatum*)
53. Baby's-Breath (*Gypsophila paniculata*)
54. Hooked Buttercup (*Ranunculus recurvatus*)
55. Spotted Wintergreen (*Chimaphila maculata*)
56. Flowering Dogwood (*Cornus florida*)
57. Southern Lady Fern (*Athyrium asplenoides*)
58. Bitter Wintercress (*Barbarea vulgaris*)
59. European Lily of the Valley (*Convallaria majalis*)

60. Rattlesnakeweed (*Hieracium venosum*)
61. Pinkster Flower (*Rhododendron periclymenoides*)
62. Flat-branched Tree-Clubmoss (*Dendrolycopodium obscurum*)
63. Creeping Cinquefoil (*Potentilla reptans*)
64. Tulip Tree (*Liriodendron tulipifera*)
65. Fan Clubmoss (*Diphasiastrum digitatum*)
66. Eastern Redcedar (*Juniperus virginiana*)
67. Wild Comfrey (*Andersonglossum virginianum*)
68. Partridgeberry (*Mitchella repens*)
69. Broad Beech Fern (*Phegopteris hexagonoptera*)
70. Round-lobed Hepatica (*Hepatica americana*)
71. Crane-fly Orchid (*Tipularia discolor*)
72. Rue Anemone (*Thalictrum thalictroides*)
73. Christmas Fern (*Polystichum acrostichoides*)
74. Rattlesnake Fern (*Botrypus virginianus*)
75. Virginia Creeper (*Parthenocissus quinquefolia*)
76. Indian Cucumber Root (*Medeola virginiana*)
77. Slender Toothwort (*Cardamine angustata*)
78. Cutleaved toothwort (*Cardamine concatenata*)
79. White wood aster (*Eurybia divaricata*)
80. Winterberry (*Ilex verticillata*)
81. Arrow-leaved tearthumb (*Persicaria sagittata*)
82. Pignut hickory (*Carya glabra*)
83. Red Maple (*Acer rubrum*)
84. Silver maple (*Acer saccharinum*)
85. Mountain Laurel (*Kalmia latifolia*)
86. Virginia Spring Beauty (*Claytonia virginica*)
87. Jewelweed (*Impatiens capensis*)
88. Poison Ivy (*Toxicodendron radicans*)
89. Eastern Skunk Cabbage (*Symplocarpus foetidus*)
90. Lesser Periwinkle (*Vinca minor*)
91. Virginia Strawberry (*Fragaria virginiana*)
92. American Hornbeam (*Carpinus caroliniana*)
93. Pink azalea (*Rhododendron periclymenoides*)
94. Woman's Tobacco (*Antennaria plantaginifolia*)
95. Ground Ivy (*Glechoma hederacea*)
96. Heartleaf Foamflower (*Tiarella cordifolia*)
97. Lowbush Blueberry (*Vaccinium angustifolium*)
98. Black Huckleberry (*Gaylussacia baccata*)
99. Redring Milkweed (*Asclepias variegata*)
100. Common blackberry (*Rubus allegheniensis*)
101. Black raspberry (*Rubus occidentalis*)
102. Royal Fern Family (Family Osmundaceae)\*
103. True Sedges (Genus *Carex*)\*
104. Mint Family (Family Lamiaceae)\*
105. Mosses (Phylum Bryophyta)\*
106. Sphagnum Mosses (Genus *Sphagnum*)\*
107. Daffodils (Genus *Narcissus*)\*

- 108. Peonies (Genus *Paeonia*)\*
- 109. Meadow-rue (Genus *Thalictrum*)\*
- 110. Iris (Genus *Iris*)\*
- 111. Adder's-tongue fern (Genus *Ophioglossum*)

**Common Invasives**

- 112. Multiflora Rose (*Rosa multiflora*)
- 113. Japanese stilt grass (*Microstegium vimineum*)
- 114. Autumn Olive (*Elaeagnus umbellata*)
- 115. Tree-of-heaven (*Ailanthus altissima*)
- 116. Wineberry (*Rubus phoenicolasius*)
- 117. Asiatic bamboo (Subfamily Bambusoideae)\*

**Count of plants and mosses identified to a species level: 106**

**Total of organisms that were identified to the species level:  
226**

Total organisms observed (including those not identified down to a specific ID and marked with an asterisk\*): 281

\*All organisms that were observed (and/or photographed), but not identified down to a species level, were recorded in the above list. Though included and represented in this list, they are marked with an asterisk (and do not contribute to the total species count).