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The Dragonflies and Damselflies (Insecta: Odonata) of Cranesville Swamp, Garrett County, Maryland and Preston County, West Virginia

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This report summarizes the field work completed in 1996 and 1997 for fulfillment of a Maryland Department of Natural Resources (DNR), Heritage and Biodiversity Conservation Program (HBCP) contract. The purpose for the contract was to survey for species of dragonflies and damselflies residing at Cranesville Swamp. Cranesville Swamp is located high (mean elevation 2560 ft) in the Allegheny Plateau Physiographic Region on the border of Garrett County, Maryland and Preston County, West Virginia.

Cranesville Swamp is recognized as a peatland bog formed during the most recent Ice Age. Its unique fauna and flora are maintained because of a frost-pocket microclimate habitat that is characteristic of a more northern bog-habitat than is usually found in Maryland. The biology and history of Cranesville Swamp is reasonably well documented. Good general biological accounts can be found in Mansueti (1958), Adams (1973), and Guthrie (1974). Because of its unique nature, the Nature Conservancy started purchasing Cranesville Swamp in 1960 and by 1998 had secured protection for 1,015 acres (TNC, 1998).

Two general locations were surveyed for the current study. Both belong to the Nature Conservancy (TNC). The first was the TNC boardwalk (Cranesville Bog Site) located mostly in West Virginia. The aquatic habitats surveyed were bog ponds, beaver ponds, and the small streams flowing into, and through, the bog. Muddy Creek at this site consisted of a serious of beaver ponds and provided little free-flowing stream habitat.

The second location was Muddy Creek (Muddy Creek Site) where it crosses Cranesville Road in Maryland (the old Lewis property). At this location, Muddy Creek is at the edge of the Cranesville Swamp area and has taken on the character of a free flowing river, thus providing habitat very different from the aquatic habitats found at the Cranesville Bog Site. Both the creek and side ponds/bogs were sampled. Muddy Creek was surveyed for approximately 2 kilometers west of the Cranesville Road Bridge to a few hundred meters east of the bridge.

Field work consisted of full day visits on June 11, July 16, and August 20, in 1996. This was supplemented with full day visits on May 28, June 14, June 15, July 21, September 17, and October 9, in 1997. Most of the data collected were from adults or cast skins, although limited larval samples were taken. All species of Odonata seen, along with numbers of each species, location, habitat, and behavior (territorial, ovipositional, feeding, etc.) were recorded during each visit and later transferred to data sheets. Selected information was then entered into a spread sheet program for analysis.

In addition to the current survey, Ahrens (1968) conducted a survey of dragonflies and damselflies of Cranesville Swamp during 12 collecting trips in 1966. Ahrens found forty (40)

species of Odonata during the 1966 survey; eleven (11) of which were not seen during the 1996-1997 survey. The 1996-1997 study recorded fifty-four (54) species, of which twenty-two (22) species were not recorded by Ahrens..Since the 11 species unique to the 1966 survey were mostly pond species and the majority of the 22 species unique to the 1996 - 1997 survey were mostly stream species, it is reasonable to assume that the major differences in the two surveys reflected different habitat sampling preferences by the collectors. A total of sixty-five (65) species of Odonata are currenty reported from Cranesville Swamp

The following is a completely list of all known species of dragonflies and damselflies which have been recorded from Cranesville Swamp with a short summary of their aquatic habitat preferences, known flight times, and other pertinent biological information. Included in this list are a number of species which have not previously been recorded in the literature as occurring in Maryland or West Virginia.

DRAGONFLIES (Anisoptera)

Gomphidae (Clubtails)

1. *Arigomphus villosipes* (Selys, 1854) -- The **Unicorn Clubtail** was found with reasonable frequency at beaver ponds from mid June to the end of July. A few were also found along the slower sections of Muddy Creek. The Unicorn Clubtail is widespread in Maryland.

2. *Gomphus exilis* Selys, 1854 -- A single **Lancet Clubtail** was found at Cranesville Swamp along the powerline-right-of-way at the Cranesville Bog Site on June 14, 1997. This species was not recorded by Ahrens in 1966. This dragonfly is normally associated with ponds and is widespread in Maryland.

3. *Gomphus lividus* Selys, 1854 -- The **Ashy Clubtail** was most often seen in clearings where the males could be identified by their characteristic rolling flight. This species was found from mid June to the end of July with the peak of adult activity during June. Larval habitat was Muddy Creek and its tributaries. This species was not recorded by Ahrens in 1966.

4. *Gomphus rogersi* Gloyd, 1936 -- The **Sable Clubtail** is listed by HBCP as highly rare and endangered in Maryland. A healthy population occurs along the Muddy Creek Site. Emergence occurs in mid June and adults can be found through the end of July. By the end of June the Sable Clubtail is the most abundant gomphid along Muddy Creek. Its known range along Muddy Creek extends from Springs Run to just before Swallow Falls. This population takes on added significance since the only other known site of this species in Maryland (Prince George's County) is extirpated (Orr, 1996). This species was not recorded by Ahrens in 1966.

5. *Hagenius brevistylus* Selys, 1854 -- The **Dragonhunter** is a massive dragonfly of streams and rivers and is widespread in Maryland. This species was not found during the 1996-1997 survey but was recorded by Ahrens on July 8, 1966.

6. *Lanthus vernalis* Carle, 1980 -- The **Southern Pygmy Clubtail** is currently known from two locations in Maryland. The Mount Nebo population (Garrett County) was found in 1995 and the

Steep Creek population (Blue Ridge Mountains in Frederick County) in 1994. *Lanthus vernalis* was collected from Cranesville Swamp on July 14, 1997 on a small wooded stream entering the bog on the West Virginia side. This small attractive clubtail will likely turn up in other clean water streams in Western Maryland. The larvae of *Lanthus vernalis* inhabits pools and slow moving sections of otherwise fast moving streams and is well distributed (but local) in the mountain streams of Pennsylvania and Virginia (Carle, 1983). This species was not recorded by Ahrens.

7. *Stylogomphus albistylus* (Hagen in Selys, 1878) The **Least Clubtail** is the smallest gomphid dragonfly in North America and is reasonably widespread in Maryland. A single individual was found along Muddy Creek on August 20, 1996. This species was not recorded by Ahrens.

Aeshnidae (Darners)

8. *Aeshna canadensis* Walker, 1908 -- The **Canada Darner** is a large attractive dragonfly that had not been reported from Maryland until 1993, but was recorded at Cranesville Swamp in August of 1966 on the West Virginia side (Ahrens, 1968). In Maryland, it has been found only in Garrett County. *Aeshna canadensis* was common in 1996 and 1997 at Cranesville Swamp with the adults flying from the end of July well into October. *Aeshna canadensis* is an abundant northern boreal species which is capable of covering great distances in flight. The Canada Darner most likely extends its population along its southern range under ideal conditions. The presence of cast skins of *Aeshna canadensis* indicates that at least some of the individuals complete their life cycle at Cranesville Swamp. The current population at Cranesville Swamp, based on the number of cast skins and adults, is healthy and stable. The southern most record of this species is Highland county, Virginia (Carle, 1983).

9. *Aeshna tuberculifera* Walker, 1908 -- The **Black-tipped Darner** is also a powerful flying boreal species which could conceivably show up far from its normal range. *Aeshna tuberculifera* has a very spotty record from Maryland with two historical records (both in 1916) from Prince George's County, records in Howard County in 1996 and 1997 and recent scattered records from Garrett County including Mount Nebo Wildlife Management Area, Mt. Negro Bog, Finzel Swamp, and Cranesville Swamp. The presence of cast skins of *Aeshna tuberculifera* indicates that at least some of the individuals complete their life cycle at Cranesville Swamp, but it is not as common as *A. canadensis* or *A. umbrosa*. The Black-tipped Darner was found from mid July to mid October at Cranesville Swamp. This dragonfly's southern limit is western North Carolina (Cuyler, 1984). In Virginia, *A. tuberculifera* is encountered more often than *A. canadensis*, just the opposite from what occurs in Garrett County. This species was not recorded by Ahrens in 1966.

10. *Aeshna umbrosa* Walker, 1908 -- The **Shadow Darner** is widespread in Maryland where its larvae are usually associated with slow moving streams or creeks. This species is common at Cranesville Swamp where it can be seen from August well into October with peak activity in September.

11. *Aeshna verticalis* Hagen, 1861 -- Like most of the species in this genus, the **Green-striped Darner** is a northern boreal strong-flying species, capable of covering great distances in flight. The Green-striped Darner has a very spotty record from Maryland with historical records from

Prince George's county, a 1995 and 1997 record from Anne Arundel County (Patuxent Wildlife Research Center), and scattered records from Garrett county. At Cranesville Swamp, the only individual seen was a male collected over a beaver pond on September 17, 1997. Since *Aeshna verticalis* likely extends the southern border of its range during ideal years, it is difficult to determine if these individuals are from a permanent resident population, a temporary resident population, or stray adults from the north or west. I was not able to find any larvae or cast skins of this species at Cranesville Swamp but still consider it likely that at least some individuals complete their life cycle locally. Although predominately a northern species, individuals have been collected as far south as Transylvania county, North Carolina and is rarely encountered in Virginia (Carle, 1983). This species was not recorded by Ahrens.

12. *Anax junius* (Drury, 1770) -- The **Common Green Darner** is a widespread pond species in Maryland. The flight period at Cranesville Swamp is from May through October, with July being the most active. Exuviae were collected from both beaver and natural bog ponds at Cranesville swamp.

13. *Basiaeschna janata* (Say, 1939) -- The **Springtime Darner** is a common, early spring, river dragonfly which is found throughout much of Maryland. Three individuals were seen along the free flowing sections of Muddy Creek on June 15, 1998. This species was not recorded by Ahrens in 1966.

14. *Boyeria vinosa* (Say, 1839) -- **The Fawn Darner** is a stream, fall flying species, that is widespread in Maryland. Flight period along Muddy Creek and its tributaries at Cranesville Swamp was from mid August well into October. This species was not recorded by Ahrens.

15. *Epiaeschna heros* (Fabricius, 1798) -- The **Swamp Darner** is the largest dragonfly that occurs in Maryland. It is widespread. The larval habitat is deeply-shaded swamps. Although not common at Cranesville a couple of individuals were seen during mid June of 1997. This species was not recorded by Ahrens.

Cordulegastridae (Spiketails)

16. *Cordulegaster diastatops* Selys, 1854 -- The **Delta-spotted Spiketail** is currently known in Maryland only from Garrett County. This species likes boggy streams at Cranesville Swamp and was easily found from mid June through July. This species was not recorded by Ahrens.

Macromiidae (Cruisers)

17. *Macromia illinoiensis illinoiensis* Walsh, 1862 -- The **Illinois River Cruiser** is a riverine species found throughout Maryland. Two individuals were seen flying over a free flowing section of Muddy Creek on August 20, 1997. This species was not recorded by Ahrens.

Corduliidae (Emeralds)

18. *Cordulia shurtleffi* Scudder, 1866 -- The **American Emerald** is considered to be one of the most abundant and widespread dragonfly species in Canada. In Maryland it is known only from

Garrett County. At Cranesville Swamp it is common over ponds during June and July.

19. *Epitheca canis* McLachlan, 1866 -- The **Beaverpond Baskettail** appears to be restricted in Maryland to relatively high elevation beaver ponds and man-made ponds in Garrett County. It is currently recorded from 5 locations in Garrett County but additional sites will likely be found in western Maryland. It is a common June species at Cranesville Swamp. The Beaverpond Baskettail is a widespread boreal species with the southern most record for eastern North America taken at Highland county, Virginia (Carle, 1983).

20. *Epitheca princeps* Hagen, 1861 -- The **Prince Baskettail** is a widespread species in Maryland, usually associated with large bodies of water (rivers, canals, lakes). Although not recorded during the 1996-1997 survey, Ahrens record this species on August 7 and 8, 1966 at Cranesville Swamp.

21. *Epitheca cynosura* (Say, 1839) -- The **Common Baskettail** is a widespread, often abundant spring species throughout Maryland. Although not recorded during the 1996-1997 survey, Ahrens record this species on June 18 and again on July 24, 1966 at Cranesville Swamp.

22. *Somatochlora elongata* (Scudder, 1866) -- The **Ski-tailed Emerald** is a large green-eyed dragonfly that is not difficult to find at Cranesville Swamp. It appears to replace the spring flying *Cordulia shurtleffi* as the main corduliid by late summer. Flight period at Cranesville ranges from mid July through August. The only other record of the Ski-tailed Emerald from Maryland is a single historical record from Montgomery County. However, since this species is found at upland ponds in western Virginia (Carle, 1983), I suspect that it will also turn up elsewhere in western Maryland. This species was not recorded by Ahrens.

23. *Somatochlora tenebrosa* (Say, 1839) -- The **Clamp-tipped Emerald** is a widespread species in Maryland associated with slow moving streams. Ahrens reported seeing adults in August, 1966. The 1996-1997 survey's only *S. tenebrosa* were two larvae collected from Muddy Creek on May 28, 1997.

Libellulidae (Skimmers)

24. *Celithemis elisa* (Hagen, 1861) -- The **Calico Pennant** was reported by Ahrens from Cranesville Swamp on July 9, 1966. However, this species was not seen during the 1996-1997 survey. This pond species is widely distributed in Maryland.

25. *Erythemis simplicicollis* (Say, 1839) -- Although the **Eastern Pondhawk** is one of the most common and widely distributed pond dragonflies in Maryland, the only one seen during the survey was on June 11, 1996 on a powerline-right-of-way at the Cranesville Bog site. This species was not recorded by Ahrens.

26. *Leucorrhinia intacta* (Hagen, 1861) -- The **Dot-tailed Whiteface** has been recorded in Maryland only from Garrett county. Flight period at Cranesville Swamp is June and July where it can be found at open bog and beaver ponds. This species was not recorded by Ahrens in 1966.

27. *Libellula auripennis* Burmeister, 1839 -- A single mature male **Golden-winged Skimmer** was seen over a bog pond on the West Virginia side on June 11, 1996. The species has a wide distribution in Maryland but is never found in large numbers. This species was not reported by Ahrens.

28. *Libellula cyanea* Fabricius, 1775 -- **Spangled Skimmers** were encountered near beaver ponds and on occasion at bog ponds. The flight period at Cranesville Swamp ranged from June to mid August. This dragonfly is widespread in Maryland.

29. *Libellula flavida* Rambur, 1842 -- Ahrens recorded the **Yellow-sided Skimmer** at Cranesville Swamp on June 9, 1966. This is a widespread, but uncommon, bog dragonfly in Maryland. It was not seen during the 1996-1997 survey.

30. *Libellula julia* Uhler, 1857 -- The **Chalk-fronted Corporal** is a northern dragonfly which occurs in Maryland only in Garrett County. This is a early season species with the population peaking in June, with individuals surviving until the end of July. This species is common and conspicuous at Cranesville Swamp but was not recorded by Ahrens in 1966. This is reasonable evidence that at least some changes in the Odonata species composition has changed at Cranesville Swamp during the past 30 years.

31. *Libellula luctuosa* Burmeister, 1839 -- Only a few **Widow Skimmers** were observed at Cranesville Swamp during 1996 and 1997. All were recorded near beaver ponds along Muddy Creek. Flight period ranged from July through mid August. This species is widely distributed in Maryland.

32. *Libellula lydia* Drury, 1770 -- The **Common Whitetail** is one of the most common and widely distributed pond dragonflies in Maryland. It is conspicuous at Cranesville Swamp throughout its flight period from June (when it is very abundant) through August.

33. *Libellula pulchella* Drury, 1770 -- The **Twelve-spotted Skimmer** is a conspicuous pond species at Cranesville Swamp with a flight period of June through August with highest numbers of individuals appearing in July. This dragonfly is widespread in Maryland.

34. *Libellula semifasciata* Burmeister, 1839 -- The **Painted Skimmer** prefers boggy areas with abundant emergent vegetation. This species is widely distributed in Maryland. The Painted Skimmer's flight period at Cranesville Swamp is from June through July but is never encountered in great numbers.

35. *Pachydiplax longipennis* (Burmeister, 1839) -- The **Blue Dasher** is probably the most abundant summer dragonfly in Maryland where it can be found at nearly any still or slow moving pond or stream. Blue Dashers can be seen from June through August at Cranesville Swamp.

36. *Pantala hymenaea* (Say, 1839) -- The **Spot-winged Glider** is a migratory species. A single individual was seen over an open field on July 16, 1996 and was probably a stray. Although this species most likely completes its larval cycle on the coastal plain in Maryland (Orr, 1996) it is unlikely that this species could complete larval development in the colder waters of Cranesville

Swamp. This species was not recorded by Ahrens.

37. *Perithemis tenera* (Say, 1839) -- Although the **Eastern Amberwing** is a common pond species throughout Maryland, it was not observed during the 1996-1997 survey. However, Ahrens did find it at Cranesville Swamp on August 8, 1966.

38. *Sympetrum obtrusum* (Hagen, 1867) -- The **White-faced Meadowhawk** is a small stream species which is common in Western Maryland. The adults can be found at Cranesville Swamp from July through September with the peak activity occurring in August.

39. *Sympetrum semicinctum* (Say, 1839) -- The **Band-winged Meadowhawk** also occurs in small streams but is much less common in Western Maryland than *S. obtrusum*. Its flight period at Cranesville Swamp runs from July through September.

40. *Sympetrum vicinum* (Hagen, 1861) -- The **Yellow-legged Meadowhawk** is a late-fall pond dragonfly found throughout Maryland. It is the most abundant fall dragonfly at Cranesville bog. The flight period lasts from July well into October.

41. *Tramea lacerata* Hagen, 1861 -- **Black Saddlebags** are migratory. This dragonfly is common in eastern Maryland but much less so in Western Maryland. Dave Czaplak (personal communication) saw a mature male of this species at Cranesville Swamp on June 20, 1993. Neither the 1966 or the 1996-1997 surveys reported this species.

DAMSELFLIES (Zygoptera)

Calopterygidae (Broad-winged Damsels)

42. *Calopteryx aequabilis* Say, 1839 -- The **River Jewelwing** most likely occurs at the Muddy Creek Site. Two larvae were collected on May 28, 1997, which key to *Calopteryx aequabilis* in Westfall and May (1996). Although this species is abundant in the northern United Sates (Johnson, 1974), records south of central Pennsylvania are uncommon. Carle (1988) lists five records for this species in northwestern Virginia and the United States National Museum has specimens from an unspecified Maryland locality (Nancy Adams personal communication). However, I was unable to find adults of this species at Muddy Creek even though this species is easily identified and generally very conspicuous in the adult stage. Because of this and due to the uncertainties in damselfly larval identification I am reluctant, at this time, to list the River Jewelwing beyond "likely to occur" for the Muddy Creek Site. I am not aware of any other current known location for this species in Maryland. This species was not recorded by Ahrens.

43. *Calopteryx amata* Hagen, 1889 -- The **Superb Jewelwing** is a spectacular large metallic green and bronze damselfly currently known from Maryland from three sites, all located in Garrett County. It is a common resident, although much less so than *C. maculata*, at the Muddy Creek Site where the adults can be seen from early June through August . This species is likely to turn up at other cold shallow rivers and streams in Garrett County when additional survey work is completed. This species was not recorded by Ahrens in 1966.

44. *Calopteryx maculata* (Beauvois, 1805) -- The **Ebony Jewelwing**, with its jet black wings, is a common conspicuous large damselfly of streams throughout Maryland. This species is by far the most common *Calopteryx* at Cranesville Swamp and Muddy Creek where it can be seen during the months of June through August with the greatest number of individuals in July.

Lestidae (Spreadwings)

45. *Archilestes grandis* (Rambur, 1842) -- The **Great Spreadwing** is the largest damselfly in Maryland. This species is a widespread fall species in Maryland where it is usually associated with small streams. A single male was collected near a bog pond on October 9, 1997. This species was not recorded by Ahrens.

46. *Lestes congener* Hagen, 1861 -- The **Spotted Spreadwing** is a widespread, but uncommon, fall-flying species in Maryland. At Cranesville Swamp in was most often encountered at beaver ponds. Flight period was from mid August into October. The adult population was most abundant during October.

47. *Lestes disjunctus disjunctus* Selys, 1862 -- The **Common Spreadwing** consists of two subspecies in Maryland. *Lestes disjunctus australis* is the most abundant pond spreadwing in Eastern Maryland. The subspecies found at Cranesville Swamp, *L. disjunctus disjunctus*, is known from Maryland only from Garrett County. This subspecies is common at Cranesville Swamp where the adults can be found at ponds from mid July to mid September with peak activity in September. This species is morphological very close to *Lestes forcipatus* which was recorded by Ahrens in 1966. Although it is likely that Ahrens' *L. forcipatus* was actually misidentified *L. disjunctus disjunctus*, the possibility that *L. forcipatus* did, or still does, occur at Cranesville Swamp can not be completely ruled out.

48. *Lestes eurinus* Say, 1839 -- The **Amber-winged Spreadwing** is uncommon, but widespread, in Maryland where it utilizes ponds for larval development. The only record of this species from Cranesville Swamp is from June 20, 1993, where three adults were seen by Dave Czaplak (personal information) near the TNC boardwalk.

49. *Lestes rectangularis* Say, 1839 -- The **Slender Spreadwing** is a common, widespread, pond damselfly in Maryland. At Cranesville Swamp the adults can be found flying along the edges of beaver and bog ponds from July to mid October with peak activity in September.

Coenagrionidae (Pond Damsels)

50. *Amphiagrion saucium* (Burmeister, 1839) -- The **Eastern Red Damsel** has the longest flight period of any Odonata at Cranesville Swamp ranging from mid May to mid October. However, it was never common. This species is widespread but very local in Maryland where it normally is associated with grassy bogs or seeps.

51. *Argia fumipennis violacea* (Hagen, 1861) -- The **Variable Dancer** is widespread and often common in Maryland where it utilizes various still and slow moving water for larval development. At Cranesville Swamp it was seen only a few times along Muddy Creek during

the months of July and August.

52. *Argia tibialis* (Rambur, 1842) -- The **Blue-tipped Dancer** is one of the most abundant stream damselflies in Eastern Maryland. However, at Cranesville Swamp only a few individuals were seen along Muddy Creek during the months of July and August. This species was not recorded by Ahrens in 1966.

53. *Chromagrion conditum* (Hagen in Selys, 1876) -- The **Aurora Damsel** is a widespread, spring to early summer species, of ponds in Maryland. At Cranesville Swamp adults were first seen in early June, quickly thereafter reaching high numbers, then tapering off with a few adults lingering on until the end of July. This damselfly seemed to utilize beaver and bog ponds equally.

54. *Enallagma antennatum* (Say, 1839) -- The only record of the **Rainbow Bluet** from Cranesville Swamp is from July 24, 1966 (Ahrens, 1968). *Enallagma antennatum* is a northern species with its southern limit extending into Garrett and Preston Counties. Roble (1994, 1997) does not list the Rainbow Bluet as occurring in Virginia. It is recorded from Pennsylvania (Westfall and May, 1996). Ponds in and near Finzel Swamp (Garrett County) are the only current locations where *Enallagma antennatum* has been observed in Maryland. Based on the biology and mobility of this species it will likely show up in similar habitats (large clean ponds) in Garrett County.

55. *Enallagma aspersum* (Hagen, 1861) -- Although the **Azure Bluet** is a widespread pond species in Maryland, it was not found during the 1996-1997 survey. Ahrens did record this species during the months of July and August of 1966 at Cranesville Swamp.

56. *Enallagma basidens* Calvert, 1902 -- The **Double-striped Bluet** is a pond species which is found throughout Maryland. It was not seen during the 1996-1997 survey but was recorded on August 31, 1966 at Cranesville Swamp by Ahrens.

57. *Enallagma civile* (Hagen, 1861) -- Except for the Allegheny Plateau the **Familiar Bluet** is one of the most common, widespread, pond damselflies in Maryland. On Maryland's Allegheny Plateau it is mostly replaced by *E. hageni*. In was not found during the 1996-1997 survey, but Ahrens did recorded it from Cranesville Swamp in 1966 from July into October.

58. *Enallagma exsulans* (Hagen, 1861) -- The **Stream Bluet** is the most abundant stream *Enallagma* in Maryland. It is a common resident of Muddy Creek during the months of July and August.

59. *Enallagma geminatum* Kellicott, 1895 -- In Maryland, the widely distributed **Skimming Bluet** is nearly always associated with floating pond vegetation. However, it was recorded only once from Cranesville Swamp where it was found on floating vegetation along the edge of Muddy Creek on July 16, 1996.

60. *Enallagma hageni* (Walsh, 1863) -- **Hagen's Bluet** is the most abundant damselfly at Cranesville Swamp. It is primarily a pond species but is so common that individuals turned up

elsewhere. Except for a single 1922 historical record for Baltimore County, this species has not been reported in Maryland outside of Garrett County. Adults can be found at Cranesville Swamp during the months of June through August.

61. *Enallagma signatum* (Hagen, 1861) -- The **Orange Bluet** is a widespread pond species in Maryland. Even if present in large numbers this species remains inconspicuous because of its faded colors and tendency to seek out shadows. The Orange Bluet was not recorded during the 1996-1997 survey but Ahrens was able to find in during the months of July and August in 1966.

62. *Ischnura hastata* (Say, 1839) -- The **Citrine Forktail** is another widespread damselfly in Maryland. Its preferred habitat is thick grass/sedge/rush emergent vegetation. At Cranesville Swamp it was encountered along the edges of beaver ponds during the months of August and September.

63. *Ischnura posita posita* (Hagen, 1861) -- For most of Maryland, the tiny **Fragile Forktail** is often the most abundant pond damselfly. Although at Cranesville Swamp it is much less conspicuous than *Enallagma hageni*, both this species and *I. verticalis* exists in high numbers. Flight period at Cranesville Swamp is from early June through mid October.

64. *Ischnura verticalis* (Says, 1839) -- The **Eastern Forktail** is common and widespread in ponds throughout Maryland. It is found in good numbers along the edges of ponds at Cranesville Swamp from early June through mid October.

65 *Nehalennia irene* (Hagen, 1861) -- The **Sedge Sprite**, along with the Citrine Forktail, are the smallest damselflies at Cranesville Swamp. Like the Citrine Forktail it prefers habitats with thick grass-like emergent vegetation. It is usually encountered at Cranesville at the edges of ponds from Mid June through August.

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