



Oliver S. Flint, Jr.
(1931-2019)

An obituary of this outstanding naturalist and world renowned expert on caddisflies appears on pages 74-88 of this issue.

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Obituary

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Dr. Oliver (“Ollie”) Simeon Flint, Jr., world renowned expert on caddisflies, died on May 18, 2019, at the age of 87 after a prolonged period of gradually declining health. A longtime resident of Alexandria, Virginia, he was born on October 10, 1931, in Amherst, Massachusetts. Ollie grew up on the same street where the renowned dipterist Charles P. Alexander (1889–1981) resided. Alexander was the author of >11,000 insect descriptions (Knizeski, 1979; Byers, 1982; Oosterbroek, 2009), primarily of crane flies (Tipuloidea), including three patronyms for Ollie (Alexander, 1961, 1967, 1970). In his youth, Ollie mowed the professor’s lawn. Alexander became his entomological mentor and many years later (1981), he sold his enormous insect collection (>13,000 species and 55,000 slides; Oosterbroek, 2009) and library to the Smithsonian Institution’s National Museum of Natural History, at least in part because of his great respect for Ollie’s accomplishments as a curator and research scientist there.

After graduating from high school, Ollie remained in Amherst and enrolled at the University of Massachusetts, where he obtained a B.S. in Biology in 1953 (*magna cum laude* and departmental honors). Two years later, he obtained a M.S. degree in biology from that same institution under the direction of Marion E. Smith (191?–1988), a colleague and former student of Alexander who studied Diptera (primarily mosquitoes) and Lepidoptera. Ollie’s Master’s thesis was titled “The life history and biology of the genus *Frenesia* (Trichoptera: Limnephilidae)” and was published a year

later in the *Bulletin of the Brooklyn Entomological Society* (Flint, 1956). It was the first of his many papers on caddisflies. Ollie pursued further study in the Department of Entomology and Limnology at Cornell University, where he earned a Ph.D. in 1960 under the direction of Clifford O. Berg (1912–1987), who studied sciomyzid flies and snail-borne diseases, being the first to discover that fly larvae prey on snails (Brown et al., 2010). Ollie was a National Science Foundation Predoctoral Fellow at Cornell from 1957–1959. His 264-page dissertation, entitled “Taxonomy and biology of Nearctic limnephilid larvae (Trichoptera) with special reference to species in eastern United States” was published in 1960 in *Entomologica Americana*. Because of his expertise in the fields of entomology, botany, and geology at an early age, Ollie had been offered graduate fellowships in all three disciplines, but chose the former for his career. However, he maintained his interests in botany and geology throughout his lifetime, and became quite knowledgeable of tropical botany.

In 1961, Ollie was hired as an Associate Curator of Entomology by the National Museum of Natural History (NMNH), Smithsonian Institution, in Washington, D.C. He assumed responsibility for a relatively small collection of Neuropteroid insects that was previously cared for by Sophy I. Parfin (1918–1966), who specialized in the order Neuroptera (Gurney & Walkley, 1967). His duties were to curate and do research on the “smaller insect orders”, especially the “Neuropteroids.” He was promoted to Curator in Charge of Aquatic Insects and Neuropteroids in 1965 and retired at the end of 1995 after 35 years of employment as a Smithsonian scientist. The collection experienced tremendous growth during Ollie’s tenure, largely as a result of his own worldwide field work. He was appointed Curator Emeritus in 1996 and continued to collect, curate, identify, and publish for more than two additional decades (Fig. 1), often visiting the museum until the last six months of his life. No successor has been hired to fill his position since his retirement.

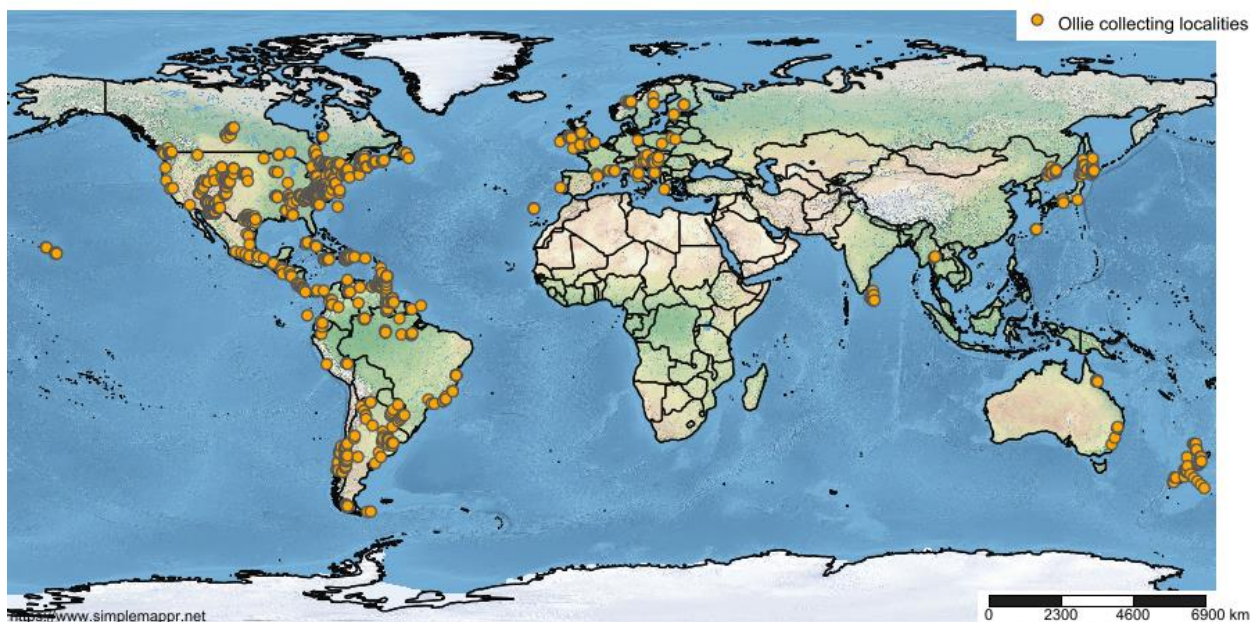
Ollie was a knowledgeable and dedicated curator, who took great pride in the quality, quantity, organization, and geographic coverage of the collections under his care. He had an excellent memory, a prerequisite of a good taxonomist and museum curator. His primary curatorial duties at the Smithsonian included five orders of aquatic insects (Ephemeroptera [mayflies], Odonata [dragonflies and damselflies], Plecoptera [stoneflies], Megaloptera [dobsonflies, fishflies, and alderflies], and Trichoptera [caddisflies]) and three orders of primarily or exclusively terrestrial insects (Neuroptera [lacewings, owlflies, antlions, mantisflies, spongillaflyies, and relatives], Raphidioptera [snakeflies], and Mecoptera [scorpionflies]). Collectively, these

orders currently account for more than 12,000 species and almost 400,000 specimens in the Smithsonian collection (Dikow, 2019). Ollie was also briefly responsible for the mosquito, louse, and flea collections. The Trichoptera collection is regarded as the most comprehensive, best curated, and most studied of its kind in the world, with its greatest strength being the Neotropical fauna. It includes vast numbers of both pinned and alcohol-preserved specimens of caddisflies that are well labelled and organized and easily accessible to visitors. The Smithsonian Odonata collection is also among the largest in the world, and is considered the best curated insect collection at that museum because it is both databased and well organized (nearly all specimens are stored in clear envelopes with 3 x 5 inch cards and housed in cardboard boxes). The type specimens of all orders under Ollie's care are also databased. A published summary (Flint, 2002) of the Smithsonian Neuropterida collection accounts for about 132 species of Megaloptera, 1,192 species of Neuroptera, and 33 species of Raphidioptera housed in 221 insect drawers (pinned adult specimens) and 311 bottles of vials (alcohol-preserved specimens of various life stages).

Ollie was a tireless collector (Fig. 2). He would often collect both day and night, searching for insects such as caddisfly larvae and dragonfly and damselfly adults by day and running ultraviolet lights after dark for nocturnal insects, especially adult caddisflies. He was fond of

using a long-handled tropics net (Fig. 3) and was known among his colleagues for his unique technique of using his shirt pocket to properly pin caddisflies. Ollie conducted field work and collected insects on all continents (at least 45 countries; map 1) except Africa, including a midge on Antarctica (Dikow, 2019). He contributed countless thousands of insect specimens belonging to at least 14 orders to the Smithsonian collection. While the majority of these were caddisflies, he also added >26,000 specimens of Odonata from numerous countries worldwide (including 8,000 from North America) to the collection (Dikow, 2019). Ollie collected many undescribed species of insects during his career, and was often accompanied in the field by his wife Carol (Fig. 4), who also collected and recorded field notes. Many type specimens of Trichoptera and other insects bear their collecting labels.

Ollie and Carol served as warm, gracious hosts to many Smithsonian visitors for nearly a half century, including colleagues and students from all over the world, as well as local visitors such as me. I made dozens of visits to the Smithsonian during the past quarter century, usually day trips, and spent time with Ollie on most of those visits (Fig. 5). The Flints also invited me to stay at their residence on overnight trips. Ollie mentored students of both Trichoptera (mostly) and Megaloptera, generously sharing his vast knowledge, expertise, and collections.



Map 1. Oliver Flint's worldwide insect collecting localities include at least 45 countries on all continents except Africa (Courtesy of Erin Kolski and Torsten Dikow, Department of Entomology, National Museum of Natural History, Smithsonian Institution).



Fig. 1. Ollie Flint in his Smithsonian office, March 16, 2012 (William L. Murphy photo).



Fig. 2. Ollie Flint sampling aquatic plants for larvae of the caddisfly genus *Macronema* at Laguna Escondida in Los Tuxtlas, Veracruz, México, December 1975 (Joaquin Bueno-Soria photo).



Fig. 3. Ollie Flint searching for the scorpionfly *Panorpa lugubris* at Blackwater Ecological Preserve, Isle of Wight County, Virginia, September 23, 2008 (Arthur V. Evans photo).



Fig. 4. Ollie and Carol Flint sorting and retrieving caddisfly adults after sweepnetting on a field trip during the 5th International Symposium on Trichoptera held in Lyon, France, July 23, 1986 (Henri Tachet photo).



Fig. 5. Steve Roble, Ollie Flint, and Paul Bedell in Ollie's Smithsonian office, October 8, 2009, two days before his 78th birthday (Arthur V. Evans photo).



Fig. 6. Joe Keiper (Director, Virginia Museum of Natural History [VMNH]), Arthur Evans (presenter), and Ollie Flint (recipient of the Thomas Jefferson Medal for Outstanding Contributions to Natural Science) at the VMNH Foundation's 29th annual awards ceremony, Waynesboro, Virginia, March 24, 2016 (photo courtesy of VMNH).

Collectively, the Flints have been honored by nearly 90 colleagues worldwide through their descriptions of at least 102 patronyms, including three genera (*Flintiella* Angrisano, 1995; *Osflintia* Calor & Holzenthal, 2008 [both Trichoptera]; *Flintoconis* Sziráki, 2007 [Neuroptera]) and 99 species, in at least 11 insect orders (J. C. Morse, unpub. data; list available at Dikow, 2019). Slightly more than half of these taxa are caddisflies, including two genera and 53 species from all continents except Antarctica (Morse, 2019). Six caddisflies bear the specific epithet *carolae* in Carol's honor, including two described by Ollie. Two damselflies and four dragonflies, from South America, Mexico, Sri Lanka, and China, are named in honor of Dr. Flint (Garrison & von Ellenrieder, 2016; Hämäläinen, 2016; Schorr & Paulson, 2019). Among the nine stoneflies named in his honor are two North American species that he first collected in Virginia, *Acroneuria flinti* Stark & Gaufin, 1976 and *Megaleuctra flinti* Baumann 1973 (Table 1). The former remains known only from the female holotype specimen (Kondratieff & Kirchner, 1991).

Ollie was widely respected internationally for his worldwide expertise and lifetime scholarly work on the systematics of caddisflies (Trichoptera), especially the Neotropical fauna. He published about 250 papers, most of them containing descriptions of new species of insects, including >1,200 caddisflies (~7.5% of the known world fauna [>16,000 extant species; Morse, 2019]), as well as new species of dobsonflies, fishflies, alderflies (all Megaloptera), and spongillaflies (Neuroptera: Sisyridae). He also described one new family and 23 new genera (12 in the family Hydroptilidae) of caddisflies (Holzenthal et al., 2007; Morse, 2019), as well as the larval stages of many caddisfly species. His initial interest in caddisflies was focused on their larvae, of which he described many, but most of his career was devoted to the collection and description of the adults of new caddisfly species. In perhaps the last paper published during his lifetime, Ollie and his coauthors synonymized the Neotropical caddisfly family Anomalopsychidae, which he had described nearly four decades earlier (Flint, 1981), with the monotypic Australian family Antipodoeciidae (St Clair et al., 2018). Regrettably, Ollie did not live long enough to prepare the description of an apparently new species of *Pycnopsyche* (near *flavata* [Banks, 1914]) that I collected in southwestern Virginia in 2012 – he kept hoping that I would succeed in obtaining additional specimens before proceeding with its description.

Along with his late colleague Glenn Wiggins (1927–2013) of the Royal Ontario Museum in Toronto, Ollie was a major early contributor to an effort to summarize the state and provincial distributions of all North American species of Trichoptera. They shared their

collective data with John Morse of Clemson University, who had also independently begun a similar effort. This eventually led to the creation of a continuously updated document that includes the state and provincial distribution of every species, along with the sources reporting each species from each jurisdiction (Rasmussen & Morse, 2018). With regard to the caddisfly fauna of Virginia, Ollie described 19 of the 374 species that inhabit the state, including seven that have Virginia type localities (Table 2). One of these species, *Ceraclea ruthae* (described in the genus *Athripsodes*), was named for his first wife Ruth (mother of his three children) on the basis of two specimens she had collected, one each in New York (1960) and (with Ollie and J. F. Hanson in 1962) in Massachusetts (Flint, 1965). Much to Ollie's surprise and delight, I collected the lone Virginia specimen of *C. ruthae* in Highland County nearly four decades later (2003), a major range extension from the nearest known localities in northern Pennsylvania (see Flint et al., 2008). Ollie also named at least one species of caddisfly for his daughters, namely *Plectromacronema lisae* from Chiapas, Mexico, in honor of his middle daughter Elisabeth for her childhood discovery of this species (Flint, 1983).

Ollie was also a leading world expert on the insect Order Megaloptera and mentored several students of this group. One of the alderflies (Sialidae) that he described, *Sialis contigua* (Flint, 1964), was discovered in May 1963 by Ollie and fellow Smithsonian curator William D. Field (lepidopterist) along the East Fork of the Potomac River in Highland County, Virginia (they also collected the type series of the caddisfly *Hydropsyche potomacensis* Flint 1965 at this locality on the same trip). Ollie was also very knowledgeable about the other insect orders under his care, especially Odonata. In a 1991 paper summarizing the Smithsonian's Odonata collection, he tallied about 75,000 specimens representing 2,400 species and 424 genera (Flint, 1991). These totals have increased in the intervening three decades, largely through Ollie's collecting efforts. His publications on Odonata include a paper on Malaise trap records from Virginia, and faunal surveys of Cuba, the Dominican Republic, and Manu National Park in Peru.

Ollie was not hesitant to scrutinize the conclusions of leading experts of other insect groups under his care. During the course of his recent studies of the Mecoptera fauna of Virginia, he initially thought that some of the specimens collected by me and others, including the late Richard Hoffman of the Virginia Museum of Natural History (VMNH), might represent undescribed species. Subsequently, he carefully studied these species in great detail and concluded that the leading experts on this small, ancient order of insects had not accurately defined or delineated several species (Flint, 2013). Also, his

Table 1. North American stoneflies and caddisflies described in honor of Oliver S. Flint, Jr. The type locality (TL) is listed if it is in Virginia. The known state distribution of each species is shown in brackets.

Plecoptera (stoneflies)

Acroneuria flinti Stark & Gaufin, 1976 [VA]
 Stark, B. P., & A. R. Gaufin, 1976 The Nearctic species of *Acroneuria* (Plecoptera: Perlidae).
 Journal of the Kansas Entomological Society 49(2): 221–253.
 TL: Virginia, Fairfax Co., Bull Run Park

Megaleuctra flinti Baumann, 1973 [MD, PA, VA, WV]
 Baumann, R.W. 1973. New *Megaleuctra* from the eastern United States (Plecoptera: Leuctridae).
 Entomological News 84: 247–250.
 TL: Virginia, (Madison Co.), Hogcamp Brook, Shenandoah National Park

Trichoptera (caddisflies)

Agapetus flinti Parker, Etnier, & Baxter 2010 [NC]
 Etnier, D. A., C. R. Parker, J. T. Baxter, Jr., & T. M. Long. 2010. A review of the genus *Agapetus* Curtis
 (Trichoptera: Glossosomatidae) in eastern and central North America, with description of 12 new species.
 Insecta Mundi 0149: 14–16.

Cheumatopsyche flinti Gordon, 1974 [TX]
 Gordon, A. E. 1974. A synopsis and phylogenetic outline of the Nearctic members of *Cheumatopsyche*. Proceedings
 of the Academy of Natural Sciences, Philadelphia 126(9): 117–160.

Note: Moulton (1996, Journal of the Kansas Entomological Society 69: 272–273) concluded that *C. flinti* is a junior
 synonym of *C. comis* Edwards & Arnold, 1961 [NM, OK, TX].

Goerita flinti Parker, 1999 [TN, NC]
 Parker, C. R. 1998 [1999]. A review of *Goerita* (Trichoptera: Goeridae), with description of a new species.
 Insecta Mundi 12(3-4): 228–230.

Homoplectra flinti Weaver, 1985 [TN, NC]
 Weaver, J.S., III. 1985. A new species and new generic synonym of the Nearctic caddisfly genus *Homoplectra*
 (Trichoptera: Hydropsychidae). Entomological News 96(2): 71–77.

Lepidostoma flinti Wallace & Sherberger, 1972 [NC, SC]
 Wallace, J. B., & F. F. Sherberger. 1972. New Nearctic species of *Lepidostoma* in the *vernalis* group from the
 southern Appalachians (Trichoptera: Lepidostomatidae). Entomological News 83(8): 222–228.

Table 2. Virginia caddisfly species described by Oliver S. Flint, Jr. and coauthors (* = type locality [TL] is in Virginia).

Brachycentridae

Adicropheps hitchcocki Flint, 1965

Brachycentrus appalachia Flint, 1984

Brachycentrus solomoni Flint, 1984

Hydropsychidae

**Homoplectra monticola* (Flint 1965) - described in genus *Aphropsyche*

TL: Virginia, (Madison Co.), Shenandoah National Park, Hogcamp Brook just below Skyline Drive

**Hydropsyche bassi* Flint, Voshell & Parker, 1979

TL: Virginia, Russell Co., Big Cedar Creek at Rt. 19

Hydropsyche brunneipennis Flint & Butler, 1983

TL: Maryland, Potomac River (opposite Fairfax Co., Virginia)

**Hydropsyche franclemonti* Flint, 1992

TL: Virginia, Culpeper Co., Hazel River, off Rt. 707

Hydropsyche macleodi (Flint, 1965) - described in genus *Ceratopsyche*

**Hydropsyche potomacensis* Flint, 1965

TL: Virginia, Highland Co., bridge on Rt. 220 over East Fork of Potomac River

Hydropsyche rossi Flint, Voshell & Parker, 1979

Hydropsyche mississippiensis Flint, 1972

Hydropsyche ophthalmica Flint, 1965

Lepidostomatidae

Lepidostoma carrolli Flint, 1958

Lepidostoma serratum Flint & Wiggins, 1961

Leptoceridae

Ceraclea ruthae (Flint, 1965) - described in genus *Athripsodes*

Limnephilidae

**Pycnopsyche pani* Wojtowicz & Flint, 2008

TL: Virginia, Botetourt Co., McFalls Creek, Rt. 618

Polycentropodidae

Nyctiophylax nephophilus Flint 1964 (placed in *Paranyctiophylax* in Flint et al. 2004 *Banisteria* paper)

Rhyacophilidae

**Rhyacophila shenandoahensis* Flint, 1958

TL: Virginia, Madison Co., White Oak Canyon Trail, Shenandoah National Park

Uenoidae

**Neophylax virginica* Flint & Kjer 2011

TL: Virginia, Clarke Co., Shenandoah River, Rt. 621

recent studies of the Virginia Neuroptera fauna led him to question the conclusions of a recent study on lacewings, resulting in a revisionary addendum (Tauber & Flint, 2010). Although Ollie was primarily a classical taxonomist, in recent years he collaborated with others on several papers concerning genetic studies of caddisflies, particularly the use of DNA barcoding (Zhou et al., 2011, 2016; Frandsen et al., 2016).

In addition to his work at the Smithsonian, Ollie was a strong supporter of the Virginia Museum of Natural History (it became a state agency in 1988), and a long-time friend and contemporary of the late Richard L. Hoffman (1927-2012). In 1993, Dr. Flint was appointed a Senior Research Fellow (one of only four) of VMNH, and he also served multiple terms on the museum's board of trustees (1986–1996, 2001–2012). In 2016, he received the Thomas Jefferson Medal for Outstanding Contributions to Natural Science from the VMNH Foundation (Fig. 6).

While the bulk of his field work was conducted in exotic places, particularly tropical America (but also Sri Lanka, Japan, New Zealand, and Europe), Ollie also collected widely in the United States as well as the southeastern portion of Canada, Carol's native country. In the early portion of his career, he conducted field work in Virginia, including trips to Shenandoah National Park, the Great Dismal Swamp (more than a decade before it became a national wildlife refuge), the Mount Rogers area, and the George Washington National Forest (especially sites in Bath, Highland, and Rockingham Cos.). Ollie and Carol were longtime members of the Potomac Appalachian Trail Club. During weekend camping trips with the club in the early 1970s, they discovered the unique boreal Odonata fauna that inhabits beaver ponds in the Laurel Fork area of Highland County (Roble et al., 2009). Ollie's first collections of Virginia caddisflies were made in 1955 and his last in 2018. In 1958, he described his first new species of caddisfly, *Rhyacophila shenandoahensis*, from Shenandoah National Park (Flint, 1958).

Ollie and Carol attended many national and international meetings and symposia concerning Trichoptera, Odonata, Neuropterida, entomology, and aquatic biology (Fig. 7), including each of the first 15 International Symposia on Trichoptera, which were held in various countries approximately every third year from 1974–2015 (only John Morse also attended the first 15 symposia). In June 2006, Ollie was honored for his life-long contributions to the study of Trichoptera at the 12th International Symposium on Trichoptera held in Mexico City (Fig. 8). He also coedited the proceedings volume of the 8th Symposium. Most recently, Ollie attended the 12th International Symposium on Neuropterology held in Mexico City in May 2015. In 1996, he received the

“Award of Excellence in Benthic Science” from the North American Benthological Society (NABS; since renamed Society for Freshwater Science [SFS]). His acceptance speech concerned the role that wood-gouging larvae of the caddisfly *Hydropsyche incommoda* Hagen played in causing the deterioration and loss of structural integrity of the wooden pilings of a bridge over the Pocomoke River in southeastern Maryland, which eventually resulted in its collapse (Flint, 1996). Among various other awards that Ollie received was the diploma “Honor al Merito” from Universidad Nacional de La Plata in Argentina in September 1977. He was also a member of Sigma Xi and Phi Kappa Phi.

Dr. Flint maintained longtime memberships in numerous societies, including the American Entomological Society, Biological Society of Washington (Treasurer 1972–1977, Vice President, 1978, President, 1979), Entomological Society of Washington, International Association for Neuropterology, NABS/SFS, Societas Internationalis Odonatologica, and the Dragonfly Society of the Americas (DSA). He served on the editorial boards for the journals *Aquatic Insects* and *Journal of Neuropterology*. Ollie was one of three attendees (along with Thomas “Nick” Donnelly and Harold “Hal” White) at the 2017 national DSA meeting held in Staunton, Virginia, who had also attended the first-ever meeting of odonatologists in North America held at Purdue University in March 1963 (Fig. 9). Ollie served on the Board of Directors of the American Chestnut Land Trust from 1986–1992. He and Carol were longtime members of the Virginia Native Plant Society and often participated in local field trips of that and other similar organizations (Fig. 10).

Ollie's scientific publications span almost 70 years (1951–2019), with more papers to appear posthumously. His first paper documented a new US record of an exotic cockroach (on Cape Cod, Massachusetts), followed by two notes on hibernation in insects. He published his first caddisfly paper in 1956 (Master's thesis). Ollie collaborated with various Trichoptera and Neuropterida experts around the world, coauthoring numerous papers with them. He readily made his collections available to colleagues and students for study, resulting in a number of theses and dissertations that relied heavily on material collected by Dr. Flint (Bueno-Soria & Holzenthal, 2020). He mentored numerous visiting scientists and students at the Smithsonian, generously sharing his extensive knowledge of these taxa, especially with younger generations, as well as specimens of undescribed species (and even genera, including the monotypic *Osfintia*, described in his honor by Calor & Holzenthal [2008] nearly two decades after Ollie had recognized its uniqueness) that he had personally



Fig. 7. Carol and Ollie Flint (circled) and fellow attendees of an informal gathering (August 28-30, 1976) of caddisfly scientists and their families at Smith Mountain Lake, Virginia, following the 15th International Congress of Entomology (John Morse photo).



Fig. 8. Ollie Flint standing in front of an honorary banner presented to him at the 12th International Symposium on Trichoptera held in Mexico City in June 2006 (William L. Murphy photo, taken in the hallway outside of Ollie's Smithsonian office, February 11, 2008).



Fig. 9. Ollie Flint (circled) and fellow attendees of the first North American meeting of odonatologists, Purdue University, March 1963.



Fig. 10. Ollie Flint discussing the life histories of forest insects to participants of a hike in Holmes Run Gorge, Dora Kelley Nature Park, Alexandria, Virginia, November 2, 2013 (R. H. Simmons photo).



Fig. 11. Dianne and Wayne Mathis (left) and Ollie and Carol Flint (right) at the Flint residence, Alexandria, Virginia, March 20, 2012 (William L. Murphy photo).

collected. Even several of his junior Smithsonian colleagues, including now-retired dipterist Wayne Mathis (Fig. 11), regarded Ollie as a mentor (W. N. Mathis, pers. comm.). Dr. Mathis named two species of shore flies (Ephydriidae) in Ollie's honor (Mathis, 1985, 1997). Ollie also collaborated with Edwin Masteller, a Penn State entomologist, on various papers concerning the caddisfly faunas of Pennsylvania and Puerto Rico (e.g., Masteller & Flint, 1979, 1980a-b, 1984, 1992).

During his career, Dr. Flint published more than 60 papers in a series he entitled "Studies of Neotropical caddisflies." In 1999, he was the lead author of an important, comprehensive catalogue of the Neotropical caddisfly fauna known as of that date (Flint et al., 1999). It contains citations of original descriptions, synonymies, and the distribution by country for about 2,200 species in 24 families and 153 genera from America south of the U.S., including the West Indies. That publication was recently superseded by an updated catalog (Holzenthal & Calor, 2017), which includes more than 1,000 additional species, nearly all of them described in the intervening two decades, many by younger trichopterologists influenced by Ollie and his scholarly works. According to Ralph W. Holzenthal (pers. comm.), a leading expert on Trichoptera from the University of Minnesota, virtually every student of Trichoptera in the past 50 years has learned from Dr. Flint.

Closer to home, Ollie was a longtime supporter of the Virginia Natural History Society. A charter member (he joined in its inaugural year, 1992), he served one term as a councilor (2009–2012) and published ten papers in the society's journal *Banisteria*, including one posthumously in this issue. I had the pleasure of editing or coauthoring all but the first of these contributions.

Post-retirement, Ollie worked closely with the late Richard L. Hoffman of VMNH (Curator of Recent Invertebrates, 1989–2012) as well as me and fellow staff of the Virginia Department of Conservation and Recreation, Division of Natural Heritage (VDCR-DNH), on faunal surveys within the state. He identified thousands of Trichoptera, Megaloptera, Neuroptera, and Mecoptera specimens collected by our respective staffs, as well as those obtained during his own field work in the state. Perhaps the majority of those specimens were obtained during statewide light trapping by VDCR-DNH biologists for nocturnal insects, emphasizing moths, but also yielding large quantities of other photopositive insects such as caddisflies and stoneflies. Virtually all of the caddisflies were donated to NMNH or VMNH. We also obtained many important distributional records of Neuroptera and Megaloptera through light trapping, including a number of first state records. Ollie was genuinely interested in the collections that my staff and

I made in Virginia and eagerly awaited each new batch of specimens that I donated to the Smithsonian. He typically produced a list of their identifications and significance (e.g., new state records) shortly thereafter. He was especially pleased to receive specimens of species not previously represented in the Smithsonian collection from Virginia, or species (or even genera) for which that collection had few specimens. His efforts resulted in the publication (all in *Banisteria*) of detailed summaries concerning the composition and distribution of the Virginia fauna of each of these insect orders (Flint et al., 2004, 2008, 2009; Flint, 2014, 2015), which now total 374 Trichoptera species (highest confirmed number for any US state; his coauthors were Richard Hoffman and Charles Parker, the latter a US Geological Survey biologist and fellow caddisfly expert based at Great Smoky Mountains National Park), 72 Neuroptera, and 18 Megaloptera (the combined species total for the latter two orders exceeds that of Florida [81 species; Stange, 2000]). As the publication date of the *Banisteria* issue containing Ollie's Neuroptera paper (Flint, 2015) approached, I mailed him several small shipments of vials from my most recent (and some previously overlooked older) collections at the 11th hour. These yielded several additional new state records, including an immaculate specimen of the rarely collected antlion *Chaetoleon pumilis* (Burmeister) (Myrmeleontidae) that I had captured more than a decade earlier. This was a new genus record for Virginia, and only the third specimen for the NMNH collection, the other two (both from Florida) being more than 50 years old and in rather poor condition. Ollie was especially pleased to include that record in his paper and to add the specimen to the Smithsonian collection. Ultimately, he declared "no more shipments" so that he could finalize the paper.

Ollie's post-retirement field surveys in Virginia focused on poorly sampled areas, such as the far southwestern counties of the state, as well as the Middle Peninsula (e.g., Dragon Run) and Northern Neck areas of the Coastal Plain region. Trichoptera were the primary focus of his survey efforts (primarily through blacklight sampling) in Virginia, but he also collected numerous specimens (usually diurnally with aerial nets) of Odonata and Mecoptera. If I or someone on my staff had documented an unexpected, significant range extension, multiple new state records in a limited area, or a species that he initially thought might be undescribed, Ollie eagerly asked if he could accompany me to those sites, including military bases or private property with restricted access, as well as state natural area preserves, to obtain more specimens. I thus had the distinct pleasure of spending time in the field with Ollie on multiple occasions. He later returned to some of those same sites on his own or with Carol. He was still actively collecting

into his early-mid 80s. In his later years, Ollie also conducted surveys at Great Falls Park and Turkey Run Park (both are part of the George Washington Memorial Parkway, a national park in Fairfax Co.) in Virginia and Plummers Island, Maryland (Flint, 2008a-c, 2011). During the last decade of his life, Ollie collaborated with fellow retired entomologist and world renowned sawfly (Hymenoptera: Symphyta) expert David R. Smith on a Malaise trapping survey (2011–2018, and continuing by Dr. Smith) of the Bull Run Mountains in Fauquier and Prince William counties in northern Virginia. This study has yielded important new distributional information on Virginia Trichoptera (Flint, 2014, 2017) and other insect groups. Dr. Smith has named two South American sawflies in Ollie's honor (one of those also for Carol) >40 years apart, the most recent one being placed in its own new genus (Smith, 1973, 2014).

When I first learned of Ollie's plans to prepare a fascicle on the Mecoptera fauna (scorpionflies, hangingflies, and relatives) of Virginia about two decades ago, I began making a special effort to net adults (especially males) on many of my subsequent field trips throughout the state. During this period, I personally collected hundreds of specimens, including several new state records. Ollie was so excited about my 2010 collections of several boreal species from Highland County that we made a weeklong trip (with fellow Mecoptera expert Wes Bicha) in June of the following year to the same and other sites in that county to obtain additional material. Previously, he had accompanied other VDCR-DNH biologists (and later me) to several state natural area preserves in southeastern Virginia (Fig. 3) after they had discovered extant populations of the visually striking black-winged, red-bodied *Panorpa lugubris* (Swederus), an uncommon species that had not been seen in the state for several decades (Evans & Flint, 2009). Likewise, Ollie was very eager to visit the locality in Giles County where Richard Hoffman had discovered a population of the unusual scorpionfly *Brachypanorpa jeffersoni* Byers, well north of its previously known range limit in the Mount Rogers area (Hoffman, 2000). On 8 June 2010, he succeeded in obtaining a large series of this species from two nearby sites for the Smithsonian collection. At the time of his death, Ollie had nearly completed a guide to the Mecoptera fauna of Virginia (33 native species, the most known for any US state). I am currently making final edits to the manuscript, which will be published posthumously by VMNH in *The Insects of Virginia* series and include identification keys, detailed range maps, and superb color images of wing patterns and male genitalia (Flint et al., 2020). It will set a new standard for regional treatments of Mecoptera faunas.

Ollie Flint was a true scholar and gentleman, who was widely admired and universally liked. He had a pleasant disposition, friendly smile, good sense of humor, and was a humble, but highly productive scientist. He enjoyed sharing coffee and lunch breaks with his fellow Smithsonian colleagues and had many interests outside of biology, including art, music (classical), literature, history, travel, cultures, hiking, and fishing. In their retirement years, Ollie and Carol were 2010 graduates of the local tree steward class and participated in tree plantings and invasive species removal projects in local nature parks. They were also regular attendees at the local farmer's market, where they provided advice and information about insects and gardening to the general public. Earlier, they had founded a local garden club in Alexandria.

With the passing of Dr. Oliver S. Flint, Jr., an irreplaceable giant in the fields of entomology and natural history has been lost. He was a great scientist, mentor, colleague, and friend to many, including me. He will be sorely missed by his family, his colleagues in the Smithsonian's Department of Entomology, the entomological community at large, and all who had the privilege of knowing him. Dr. Flint's survivors include Carol Flint, his wife of 48 years, daughters Catherine Flint, Elisabeth Gay, and Maria Flint, and their mother Ruth, and four grandsons. A memorial service for Ollie was held on June 15, 2019, in Alexandria, and the Smithsonian Institution celebrated his life and career at an event at the museum on October 7, 2019. A blog (Dikow, 2019) has been prepared that summarizes Ollie's career accomplishments and includes the program and photos from the October event. Another obituary that includes additional information about Ollie's life and career is in press (Bueno-Soria & Holzenthal, 2020). Memorial contributions in Dr. Flint's name may be made to support curation of the Aquatic Insect and Neuropteroids collection at the Smithsonian Institution via the "Improvement of the Insect Collection Fund – Ollie Flint" (nhadvancement@si.edu) or to the Potomac Appalachian Trail Club (<https://www.patc.net/>).

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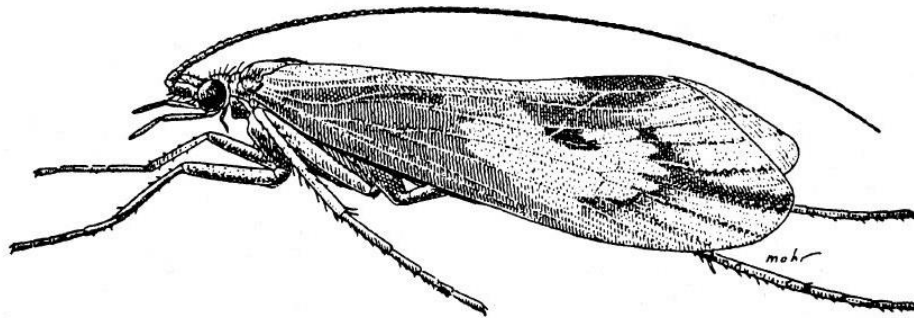
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Platycentropus radiatus (Say, 1824)

[Illustration by Carl O. Mohr; from Herbert H. Ross. 1944. *The Caddis Flies, or Trichoptera, of Illinois*. *Bulletin of the Illinois Natural History Survey* 23(1): 1–326.]