

## A Tribute to Norman I. Platnick



Norman I. Platnick at his desk in the Division of Invertebrate Zoology, American Museum of Natural History (1999). ©: S. Thurston/AMNH.

## BIOGRAPHY OF NORMAN I. PLATNICK

LORENZO PRENDINI

Curator of Arachnida and Myriapoda

Division of Invertebrate Zoology, American Museum of Natural History, Central Park West at 79<sup>th</sup> Street, New York, New York 10024-5192, U.S.A.; e-mail: lorenzo@amnh.org

**Abstract**—A biography of the eminent arachnologist and systematic biologist, Norman I. Platnick, Curator Emeritus at the American Museum of Natural History, New York, is presented.

**Key words:** Norman I. Platnick, biography, arachnology, Araneae, Ricinulei, taxonomy, catalogue, nomenclature, patronyms, systematic biology, phylogeny, classification, biogeography, evolutionary biology, biodiversity, morphology, behavior, ecology, species concepts, illustration art.

On 8 April 2020, the world received the sad news that the eminent American arachnologist and systematic biologist, and world authority on spiders (Araneae Clerck, 1757), Dr Norman Ira Platnick, Curator Emeritus at the American Museum of Natural History (AMNH), New York, had passed away at age 68 in Philadelphia, PA, after complications from a fall in his home. He married the late Nancy Stewart Price of Cambridge, MD, in 1970 and is survived by their son, William Durin Platnick, and daughter-in-law, Rebecca Ehrlich.

Norm, as he was known to friends and colleagues (Fig. 1), was born on 30 December 1951, in Bluefield, WV, to Philip (Filipas) Platnick and Ida Fannie Platnick née Kasczeniewski, Jews who immigrated to the United States from Lithuania and Poland, respectively, during the Second World War. Philip, a dentist before the war, owned a successful scrap metal business. Norm and his sister, Roberta Lee Platnick, who was ten years older, moved to Princeton, WV, with their parents when Norm was at elementary school in fourth grade. Although ‘culturally Jewish,’ Norm was nonpracticing and converted to Christianity in the final years of his life.

Norm was an accomplished reader, with an interest in classical music, at age 4. He had read the entire *World Book* encyclopedia and the *Great Books of the Western World* series by second grade. ‘When he found a bug in the woods, he would rush home to identify it in the books,’ said his mother, Fannie Platnick, in 1964. Norm’s baby-sitter took him to speed-reading classes when he was in third grade, and he scored 88% on the end-of-class test. Norm played the piano

and was composing classical music by age 12. His Intelligence Quotient (IQ) was between 148 and 178.

In a lifetime of accomplishments (Tables 1–6), Norm’s higher education timeline is in a class of its own. Getting what he called a ‘precocious start’, Norm became a college freshman at age 12, receiving a B.S. degree at 16, M.S. at 18, and Ph.D. at 21 (Table 1). He has remarked that he lacked ‘a high school diploma, having made it only through seventh grade!’ The unusual events by which this transpired were set in motion by Norm’s seventh-grade science teacher in Princeton, whose husband, Hawey Wells, was a biology professor at Concord College, Athens, WV. Wells encouraged Norm to audit his freshman biology course at Concord in the summer of 1964, if he passed the American College Testing series of college entrance examinations. Entering Concord freshmen required a minimum score of 15; Norm, tested in subjects like chemistry and physics, in which he no formal training, scored 25. Norm did not know, until an article appeared in a local newspaper (Fig. 2B), however, that he would be admitted to Concord as a freshman. Joseph Marsh, Concord’s president at the time, had visited the West Virginia State Board of Education in Charleston, WV, and mentioned Norm’s auditing arrangement in passing. The chair of the board, a former neighbor from Bluefield, knew Norm, and the board decided that, since Norm had passed the entrance examination with a score that ‘would be considered excellent five years from now,’ there was no reason not to admit him to Concord. The state board directed the Mercer County Board of Education to release Norm to





Fig. 1. Norman I. Platnick, AMNH curator. **A.** Admiring a tarantula (*Theraphosidae* Thorell, 1869) in the Division of Invertebrate Zoology, AMNH (2012). **B.** At the AMNH (2007). **C.** In the AMNH Collections of Arachnida (2005). **D.** In his office at the AMNH (2012). **E.** Examining vials of *Zorocrates unicolor* (Banks, 1901) at the AMNH (2005). **F.** Beside his portrait (**G**) and that of former AMNH Curator, John Cooke, in the Entomology corridor at the Division of Invertebrate Zoology, AMNH (2003). **G.** Portrait (1999). Photos ©: L. Romero/NY Times (**A**); D. Finnin/AMNH (**B**); O. Muhammad/NY Times (**C**); D. Zalcman/WSJ (**D**); D. Hogan Charles/NY Times (**E**); N. I. Platnick/W. D. Platnick (**F**); S. Thurston/AMNH (**G**).

Table 1. Education and appointments of Norman I. Platnick.

1964–1968	Concord College, Athens, WV, B.S. (Biology)
1968–1970	Michigan State University, East Lansing, MI, M.S. (Zoology)
1970–1973	Harvard University, Cambridge, MA, Ph.D. (Biology)
1973–1977	Assistant Curator, Department of Entomology, American Museum of Natural History (AMNH)
1977–1982	Associate Curator, Department of Entomology, AMNH
1978–2010	Adjunct Professor, Department of Biology, City College, City University of New York
1982–1998	Curator, Department of Entomology, AMNH
1987–1994	Chairman, Department of Entomology, AMNH
1988–2010	Adjunct Professor, Department of Entomology, Cornell University
1998–2010	Peter J. Solomon Family Curator of Spiders, Division of Invertebrate Zoology, AMNH
1999–2012	Adjunct Senior Research Scientist, CERC, Columbia University
2002–2003	Program Director, Biodiversity Surveys and Inventories, National Science Foundation
2010–2020	Senior Scientist and Curator Emeritus, Division of Invertebrate Zoology, AMNH

attend Concord College instead of eighth grade middle school. Norm recalled his mother receiving a telephone call from President Marsh, apologizing for how the family had received the news: the newspapers had published the story before Marsh returned to Athens.

Norm’s life as an undergraduate student, majoring in Biology at Concord College was ‘pretty normal, considering the circumstances.’ Although he was among students many years older, Norm apparently had little trouble adjusting. ‘I spent a lot of my time in the student union, playing cards with my friends, all of whom were older, of course, but that’s only natural,’ he recalled in 1968. Norm took the usual four years to graduate, commuting from Princeton on the Tri-City-Traction bus, for the first two years, until

his parents rented him a tiny apartment across from campus. Norm’s mother, Fannie, also attending classes at Concord, to complete a teaching certificate, often requested her son’s help with homework after they returned from afternoon classes. Norm also engaged in extracurricular activities at Concord. His father, Philip, a Kiwanis Club member in Princeton, encouraged Norm’s membership of Circle K, and he attended one of their national conventions in Texas. Norm enjoyed the spotlight, regularly performing (often in the role of a child), in productions of the Concord theatre department (Fig. 2A).

Those formative years as a teenager at Concord College ultimately determined the trajectory for the rest of Norm’s life, both personally and professionally. Norm’s lifelong interest in spiders

Table 2. Service to scientific societies and non-governmental organizations by Norman I. Platnick.

1972	Charter Member, American Arachnological Society (AAS)
1973–1975	Member, Committee on Systematics Collections, AAS; Member, Nominations Committee, AAS
1975–1976	Trustee, New York Entomological Society
1975–1984	Chairman, Committee on Honorary Members, Society of Systematic Zoology (SSZ)
1976–2002	Membership Secretary, AAS
1978	Member, Program Committee, Entomological Society of America, Eastern Branch
1980	Founding Fellow, Willi Hennig Society (WHS)
1983–1984	Council Member, WHS
1984–1986	Council Member, SSZ
1985–1987	Council Member, WHS
1986–1989	Vice President, Centre International de Documentation Arachnologique (CIDA)
1989–1990	Council Member, WHS
1990–1992	President, WHS
1991–1997	Co-Chair, Steering Committee and Member, Editorial Committee, Systematics Agenda 2000
1993–2020	Council Member, WHS
1994	Member, Global Biodiversity Assessment Workshop, United Nations Environmental Programme
1995–1998	President, CIDA
2005	Member, Species Selection Workshop, IUCN Sampled Red List Index

Table 3. Service on editorial boards of scientific publications by Norman I. Platnick.

1974–2013	Editorial Board: <i>Journal of Arachnology</i>
1975–1976	Trustee: <i>Journal of the New York Entomological Society</i>
1976–1977	Editorial Board: <i>Curator</i>
1976–1982	Review Editor: <i>Systematic Zoology</i>
1981–1982	Editorial Board: <i>Colemania</i>
1984–1987	Editor: <i>Cladistics</i>
1983–2014	Editorial Board: <i>Entomologica Scandinavica</i> / <i>Insect Systematics &amp; Evolution</i>
1988–2004	Advisory Board: <i>Cladistics</i> ; Editorial Board: <i>Cimbebasia</i> (Natl. Mus. Namibia, Windhoek)
1989–2006	Editorial Board: <i>Biogeographica: Compte Rendu des Séances de la Société de Biogéographie</i>
1989–2010	Editorial Board: <i>Bulletin de l'Institut Royal des Sciences Naturelles de Belgique, Série Entomologie</i>
1992–2020	International Advisory Board: <i>Annales Zoologici</i> (Mus. Inst. Zool., Polish Acad. Sci., Warsaw)
1995–2009	Editorial Board: <i>Journal of Venomous Animals and Toxins</i> (CEVAP, Univ. Estad. Paulista, Brazil)
1996–2015	Honorary Editor-in-Chief: <i>Acta Arachnologica Sinica</i>
1997–2014	Editorial Board: <i>Vestnik Zoologii</i> (Inst. Zool., Natl Acad. Sci. Ukraine, Kiev)
1997–2020	Comité Scientifique / Scientific Board: <i>Zoosystema</i> (Mus. Natl Hist. Nat., Paris)
2003–2006	Comité Científico: <i>Revista Ibérica de Aracnología</i>
2004–2014	Editorial Board: <i>Acta Zootaxonomica Sinica</i>
2009–2014	Editorial Board: <i>Entomologica Americana</i>
2009–2020	Editorial Board: <i>Turkish Journal of Zoology</i>

began serendipitously, as a direct consequence of meeting his future wife, Nancy, 'at Concord on October 12, 1967' (Fig. 2C). Their son, Will Platnick, maintains that his father's passion for spiders started because he 'tried to impress a girl.' 'It took two years for her to take me seriously,' recalled Norm. Nancy, also pursuing a B.S. in Biology, had taken a course on arthropods with myriapodologist, William Shear, Trinkle Professor Emeritus at Hampden-Sydney College, VA, and had become fascinated with millipedes (*Diplopoda* Blainville, 1844). According to Will, 'my

mom was an excellent collector and, when she went out collecting in the Appalachian Mountains, my dad would tag along to spend time with her.' Norm was 'lousy' at finding millipedes but collected spiders in abundance and tried to identify them back at college. 'I took one spider and tried to determine what it was . . . it took the better part of the day, but I finally figured out it was in the genus *Cicurina* Menge, 1871,' he recalled. The rest is history.

After graduating from Concord in 1968 (Fig. 2D), Norm accepted a teaching assistantship at

Table 4. Graduate students and postdoctoral fellows mentored by Norman I. Platnick.

1975–1978	Ph.D. Committee: I. Goldfarb, City University of New York (CUNY)
1977–1979	M.S. Committee: J. A. Kochalka, University of Vermont
1978	Ph.D. Committee: G. F. Engelmann, Columbia University
1978–1981	Ph.D. Committee: K. Johnson, CUNY
1983	Postdoctoral Supervisor: R. J. Raven, American Museum of Natural History (AMNH)
1986–1992	Major Professor, Ph.D.: B. Bain, CUNY
1987–1988	Postdoctoral Supervisor: C. E. Griswold, AMNH
1987–1992	Major Professor, Ph.D.: P. Wijesinghe, CUNY
1989	M.S. Committee: G. Gudmundsson, CUNY
1989–1994	Major Professor, Ph.D.: P. A. Goloboff, Cornell University
1991–1996	Major Professor, Ph.D.: K. Catley, Cornell University
1993–2000	Postdoctoral Supervisor: V. I. Ovtsharenko, AMNH
1994–2001	Major Professor, Ph.D.: D. Silva-Dávila, Cornell University; X.-P. Wang, Cornell University
1998–2000	Postdoctoral Supervisor: B. Huber, AMNH
1999–2001	Postdoctoral Supervisor: M. J. Ramírez, AMNH
2002–2005	Postdoctoral Supervisor: K. N. Russell, AMNH
2006–2011	Postdoctoral Supervisor: M. Burger, AMNH
2011–2012	Postdoctoral Supervisor: A. Bolzern, AMNH

Table 5. Major grants awarded to Norman I. Platnick.

1981–1982	Eppley Foundation for Research: Spider Biogeography in Western South America, \$15,500.
1984–1986	National Science Foundation (NSF), Biological Research Resources: Biogeography of Chilean Spiders, \$53,326.
1984–1989	NSF, Systematic Biology: Systematics and Biogeography of Chilean Spiders, \$110,000.
1989–1992	NSF, Biological Research Resources: Curatorial Support for Entomological Collections (with R. T. Schuh), \$653,020.
1990–1993	NSF, Biological Research Resources: Cataloging Spider Biodiversity, \$53,606. National Geographic Society: Systematics, Phylogenetics, and Biogeography of New Caledonian Spiders, \$16,400. United States-Israel Binational Science Foundation: Gnaphosid Spiders of Israel (with Y. D. Lubin), \$142,300.
1991–1995	NSF, Systematic Biology: Insect and Arachnid Biodiversity in Southern South America (with R. T. Schuh), \$244,650.
1992–1994	NSF, Systematic Biology: Molecular Phylogeny of Spider Families (with W. C. Wheeler and R. DeSalle), \$25,000.
1994–1996	NSF, Research Collections in Systematics and Ecology: Arthropod Collection Improvement (with R. T. Schuh and J. M. Carpenter), \$425,000.
1995–2000	NSF, Biotic Surveys and Inventories: Spider Biodiversity: A World Catalog, \$86,889. NSF, Partnerships for Enhancing Expertise in Taxonomy (PEET): Biodiversity of Australasian Ground Spiders, \$571,047.
1996–1998	Australian Biological Resources Study: Biodiversity of Australian Ground Spiders, \$26,117.
1997–1998	NSF, Major Research Instrumentation: Acquisition of a New Scanning Electron Microscope and Energy Dispersive Spectrometry System at the American Museum of Natural History (with W. K. Barnett and E. A. Mathez), \$374,430.
2001–2004	NSF, Instrumentation Development for Environmental Activities: A Neural Network-Based Automated Identification System for Biological Species (with K. N. Russell), \$796,818.
2002–2005	Australian Biological Resources Study: A Monograph of, and Automated Identification Systems for, the Australasian Ground Spiders of the Family Prodidomidae (Araneae, Gnaphosoidea) (with B. C. Baehr), Aus. \$75,000.
2006–2011	NSF, Biodiversity Surveys and Inventories: Planetary Biodiversity Inventories (PBI): Collaborative Research: The Megadiverse, Microdistributed Spider Family Oonopidae, \$2,063,742.

Michigan State University (MSU), East Lansing, MI, where he had initially intended to pursue a graduate degree in genetics, before realizing that arachnology was his true calling. Norm’s M.S. thesis, a revision of philodromid crab spiders of the genus *Ebo* Keyserling, 1884, was advised by Richard J. Sauer, associate director of the MSU Experiment Station, who later became professor at Kansas State University and vice-president of the University of Minnesota. In his spare time,

Norm continued to compose classical music, wrote philosophical poetry, and read Nietzsche, T. S. Eliot, James Joyce, and Peanuts.

In 1970, Norm graduated with his M.S. in Zoology, the year Nancy graduated with her B.S. from Concord, and the couple were married. The Platnicks then moved to Cambridge, MA, where Norm was advised by Herbert Levi (Fig. 4A, B), former professor and curator at the Museum of Comparative Zoology, Harvard University, grad-

Table 6. Professional honors conferred on Norman I. Platnick.

2001	Fellow, California Academy of Sciences; First Honorary Member, Arachnologische Gesellschaft
2003	Fellow, American Association for the Advancement of Science; Outstanding Alumnus, Concord University
2005	Honorary Research Fellow, Natural History Museum, London
2006	Foreign Member, Linnean Society of London
2007	Pierre Bonnet Award for Service to Advancement of Arachnology, International Society of Arachnology
2011	Honorary Member, British Arachnological Society
2013	Honorary Member, International Society of Arachnology



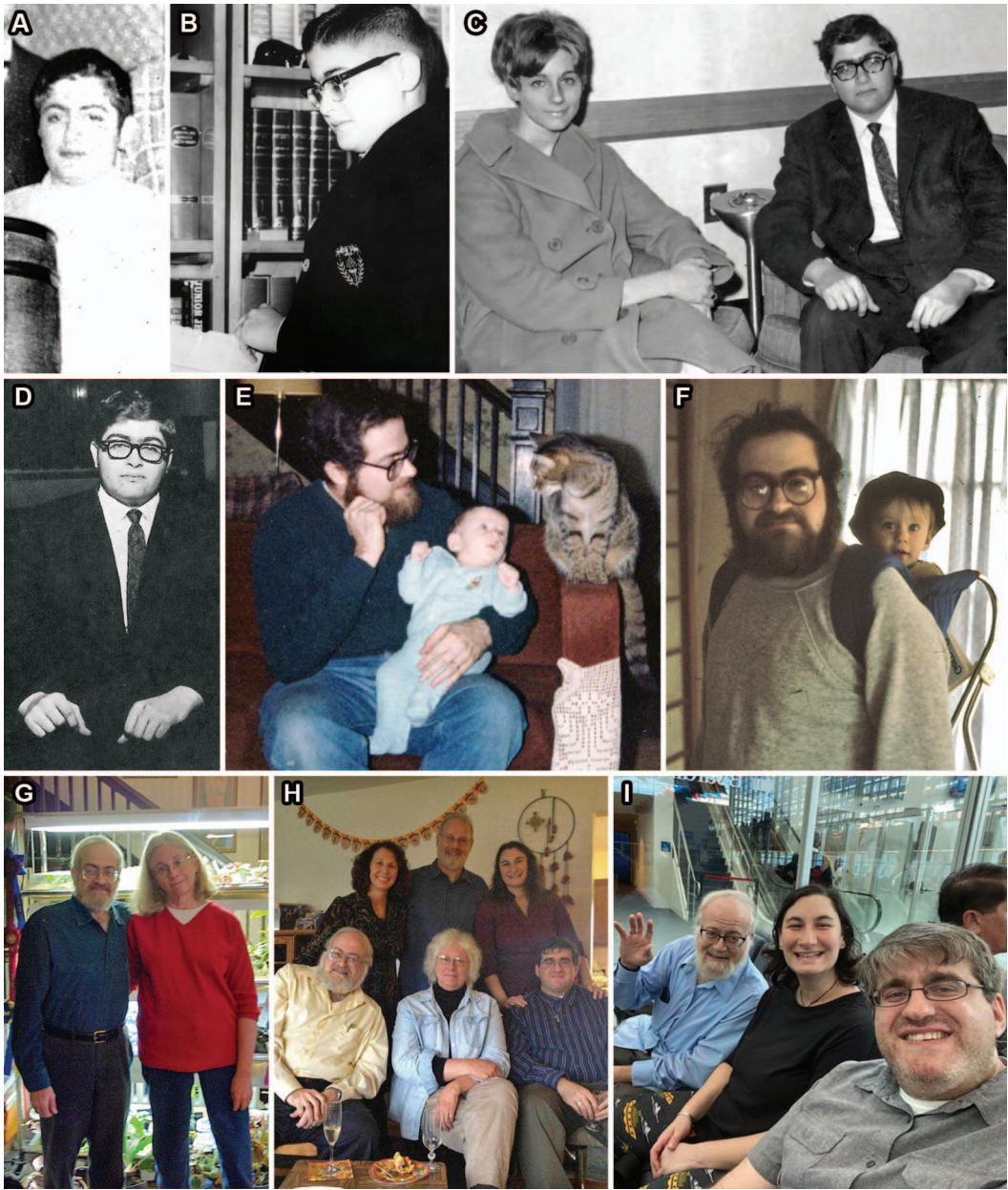


Fig. 2. Norman I. Platnick, family life. **A, B.** Norm at age 12, performing in a play at Concord College, Athens, WV (**A**) and at home in Princeton, WV, after the announcement he would be admitted to Concord (**B**). **C.** Norm and his future wife, Nancy Price, at Concord College (1968). **D.** Senior year at Concord College, age 16 (1968). **E, F.** At home in Bay Shore, NY, with his son, Will Platnick (1983, **E**; 1984, **F**). **G.** Norm and Nancy Platnick at home in Bay Shore (2004). **H.** Thanksgiving at the Ehrlich family home in Waterford, NY (2011): left to right, front row: Norm, Nancy, and Will; back row: Ellen, Drew and Rebecca Ehrlich. **I.** Norm, Rebecca and Will in the Port of Miami, FL (2020). Photos ©: Concord University (**A, D**); United Press International (**B**); N. I. Platnick/W. D. Platnick (**E–I**).

uating, in 1973, with a Ph.D. in Biology for a dissertation revising ghost spiders of the family Anyphaenidae Bertkau, 1878. The Platnicks moved to New York that same year, after Norm accepted an appointment as Assistant Curator in the AMNH Department of Entomology. For the next ten years, Norm and Nancy lived in a Manhattan apartment, a block from the AMNH. During this time, Norm received tenure and promotion to Associate Curator in 1977, and then promotion to Curator in 1982, while Nancy worked in department store (and later bank) credit card divisions, in the city.

In 1983, after their only child, Will, was born, Norm and Nancy moved to a house in Bay Shore, on Long Island, NY (Figs. 2E–H, 5C, 6A–C). Nancy worked for the next 20 years as a library aide at the nearby Brook Avenue Elementary School (Fig. 5F), later attended by their son. Norm's daily commute to the AMNH became a 4-hour roundtrip by train and subway. To avoid the rush hour, Norm left home at 5 am and returned at 3 pm. With fewer people aboard, he had 'space to work on the train,' time in which much of the work on his spider catalogs eventually took place. Looking back, Norm regarded his commute to the city as '30 years of riding the railroad.' In 1998, Norm was awarded an endowed chair as Peter J. Solomon Family Curator of Spiders (Figs. 1B, C, F, G, 3F) and served in that capacity until taking early (financial) retirement in 2010, to care for Nancy, who had cancer. He was Curator Emeritus and Senior Scientist in Residence at the AMNH Division of Invertebrate Zoology until 2014 (Fig. 1A, D). After Nancy passed away in 2013, Norm moved upstate to East Amherst, NY, to be near Will and Becca (Fig. 2I). When they moved again, to Philadelphia, in 2018, Norm purchased a house nearby.

As an AMNH Curator, Norm took over stewardship of the Collections of Arachnida and Myriapoda from former AMNH Curator, John Cooke, building on the legacy of Cooke's predecessor, Willis J. Gertsch, to continue developing the spider collection into the world's largest and most taxonomically comprehensive, a global resource with over a million specimens and 4,000 types (Fig. 1C, E). AMNH Scientific Assistant, Louis Sorkin, assisted Norm with curation of the collection, including processing outgoing and incoming loans to arachnologists and myriapodologists around the world, handled public

enquiries and outreach concerning arachnids, and undertook indispensable bibliographic work for the *World Spider Catalog*, from Norm's appointment in 1973, until his retirement. Curation of the nonspider arachnid and myriapod collections was taken over by the author, assisted by other scientific support staff, from 2002, and of the spider collections, in 2014.

Norm's arachnological expeditions to Chile, as well as Argentina, Australia, Brazil, Cuba, Ecuador, New Caledonia, New Zealand, and Panama (Fig. 3A–C, E), while AMNH Curator, were supported by \$4.3 million in research grants from the National Science Foundation (NSF), the National Geographic Society, and other foundations and funding agencies (Table 5). During one trip to New Caledonia, Norm fell down a mountain and, injured and disoriented, became lost in the forest below. 'We didn't know he was missing until someone from the research team called to say he had been found,' recalled his son, Will.

During his Chairmanship of the AMNH Department of Entomology (1987–1994), Norm secured two NSF grants that enhanced ongoing curation of the terrestrial arthropod collections, partially supporting construction of the insect compactor, followed by an instrumentation grant to acquire a scanning electron microscope for the AMNH. He served two years as Chair of the Senate of the Scientific Staff (2006–2008). In addition to his position as Curator at the AMNH, Norm served as adjunct professor at City College, City University of New York (CUNY) (1978–2014), and Cornell University (1988–2014), and as adjunct senior research scientist for the Center of Environmental Research and Conservation (CERC) at Columbia University (1999–2014), enabling him to teach courses, such as a Seminar in Zoogeography at CUNY (1980, 1981, 1998), serve on graduate student committees and mentor his own students as major professor.

Norm was a prolific scientist, publishing almost 12,000 pages in 340 printed publications, including 42 monographs, six books and two edited volumes over the course of his four-and-a-half-decade career (Prendini, 2020a). This exceptional body of work fundamentally affected several fields. 'In each of three broad areas—empirical spider systematics, biodiversity informatics, and systematics theory—he contributed so much that were it his sole effort, his life would now be





Fig. 3. Norman I. Platnick, field biologist and research scientist. **A.** New Zealand, sorting spiders from leaf litter with his son, Will Platnick, and Raymond Forster (1987). **B.** Cuba, sorting spiders from leaf litter with (from left to right) Alexander Sánchez Ruiz, Abel Perez González and Giraldo Alayón (2010). **C, E.** Ecuador (2009), sorting spiders from leaf litter with Ligia Benavides (front) and Nadine Dupérré (back) (**C**), and filming a documentary, Cristina A. Rheims in the background (**E**). **D.** Working at the Pontificia Universidad Católica del Ecuador, Quito with Martín J. Ramírez (2009). **F.** In his office at the AMNH (2004). **G.** Will, helping his dad at the AMNH (1988). Photos ©: N. I. Platnick/W. D. Platnick.

celebrated for it,' remarked Wayne Maddison, professor and Canada Research Chair at the University of British Columbia, and current President of the International Society of Arachnology.

In Norm's early years at the AMNH, former AMNH Curator, Pedro Wygodzinsky, encouraged him to read the work of Willi Hennig, the German entomologist who formulated the theory of phylogenetic systematics (Hennig, 1950, 1966), also known as cladistics. Norm was hooked and, while making his mark on the study of spiders, vigorously advocated his perspective on the use of phylogenetic methods for biological classification, along with other former AMNH curators such as Gareth Nelson, the late Donn Rosen and Eugene Gaffney, resulting in many heated debates at conferences and in the pages of journals like *Systematic Zoology* and *Cladistics* (e.g., Harper and Platnick, 1978; Platnick and Marcus, 1979; Platnick, 1986). Throughout the 1970's and early 1980's, Norm 'fought a scientific revolution'—referred to by some as the Clade Wars (Hull, 1988)—'and won' said Jonathan Coddington, Curator of Arachnida and Myriapoda at the Smithsonian Institution, who published with Norm (Forster et al., 1990; Platnick et al., 1991a, b; Griswold et al., 1995, 2005; Wheeler et al., 2017). Norm's early work, including the influential 'Blue Book,' *Systematics and Biogeography: Cladistics and Vicariance* (Nelson and Platnick, 1981), coauthored with Gareth Nelson, and seminal papers on cladistic methods in systematics, biogeography and linguistics, and on the history and philosophy of systematics (e.g., Platnick, 1976a, b, 1977a, b, 1978a, b, c, 1979, 1981a, b, 1982, 1985; Platnick and Cameron, 1977; Nelson and Platnick, 1978, 1980a, b; Platnick and Gaffney, 1978a, b; Platnick and Nelson, 1978, 1984; Platnick and Rosen, 1987), were instrumental in disseminating Hennigian tree-thinking and phylogenetic classification, profoundly influencing systematic biology, historical biogeography, and evolutionary biology more generally. The concept of using monophyletic groups, or clades, sharing evolutionary novelties, or synapomorphies, for classification 'was the most important event in the discipline since Darwin, and I would rank Norman as one of the three or four most important scientists who expanded, refined and explained these ideas to the world' remarked Quentin Wheeler, former Cornell

University professor, Keeper of Entomology at the Natural History Museum, London, and director of the International Institute for Species Exploration, State University of New York, who published with Norm (e.g., Wheeler et al., 2012), and worked with him while an NSF Program Director. Later works in systematics addressed controversies such as species concepts, three-taxon statements, DNA Barcoding and the PhyloCode (Nelson and Platnick, 1991; Platnick et al., 1996; Platnick and Wheeler, 2000; Wheeler and Platnick, 2000a, b; Lipscomb et al., 2003; Platnick, 2012, 2013a), among others.

In arachnology, the study of spiders and their kin, Norm laid the early framework of spider classification and the Tree of Life (Platnick and Gertsch, 1976; Platnick, 1975, 1977c). He continued to play an active role in resolving spider phylogeny throughout his career (Forster and Platnick, 1984; Platnick and Goloboff, 1985; Forster et al., 1990; Platnick et al., 1991a, 2012; Griswold et al., 1999, 2005; Wheeler et al., 2017), culminating in the NSF Assembling the Tree of Life (AToL): Phylogeny of Spiders grant (2002–2006), which he prepared but from which he ended up recusing himself on account of his concurrent service as an NSF Program Director. Along the way, Norm introduced new techniques, such as scanning electron microscopy, and morphological character systems, such as spinneret morphology (Platnick, 1974, 1990; Platnick et al., 1991a, 2012), which forever changed the course of spider systematics. Norm's prodigious monographic revisions and many smaller papers, often coauthored with former and current AMNH Scientific Assistants, Mohammad U. Shadab, Louis Sorkin, Nadine Dupérré and Lily Berniker, who meticulously prepared dissections, illustrations, scanning electron micrographs, and so on, added 158 new genera and 2,023 new species of spiders (Prendini, 2020b), an average of 50 names and 46 species annually, making him the second most prolific arachnologist in history, after Eugène Simon (Platnick and Raven, 2013). This monumental contribution vastly increased knowledge of spider diversity on a global scale, especially the poorly known fauna of the Southern Hemisphere, to currently more than 48,978 species (World Spider Catalog, 2020). An authority on at least ten spider families, Norm named taxa in 49 of the 120 families, across all suborders and infraorders, as well as the arachnid order Ricinulei Thorell, 1876



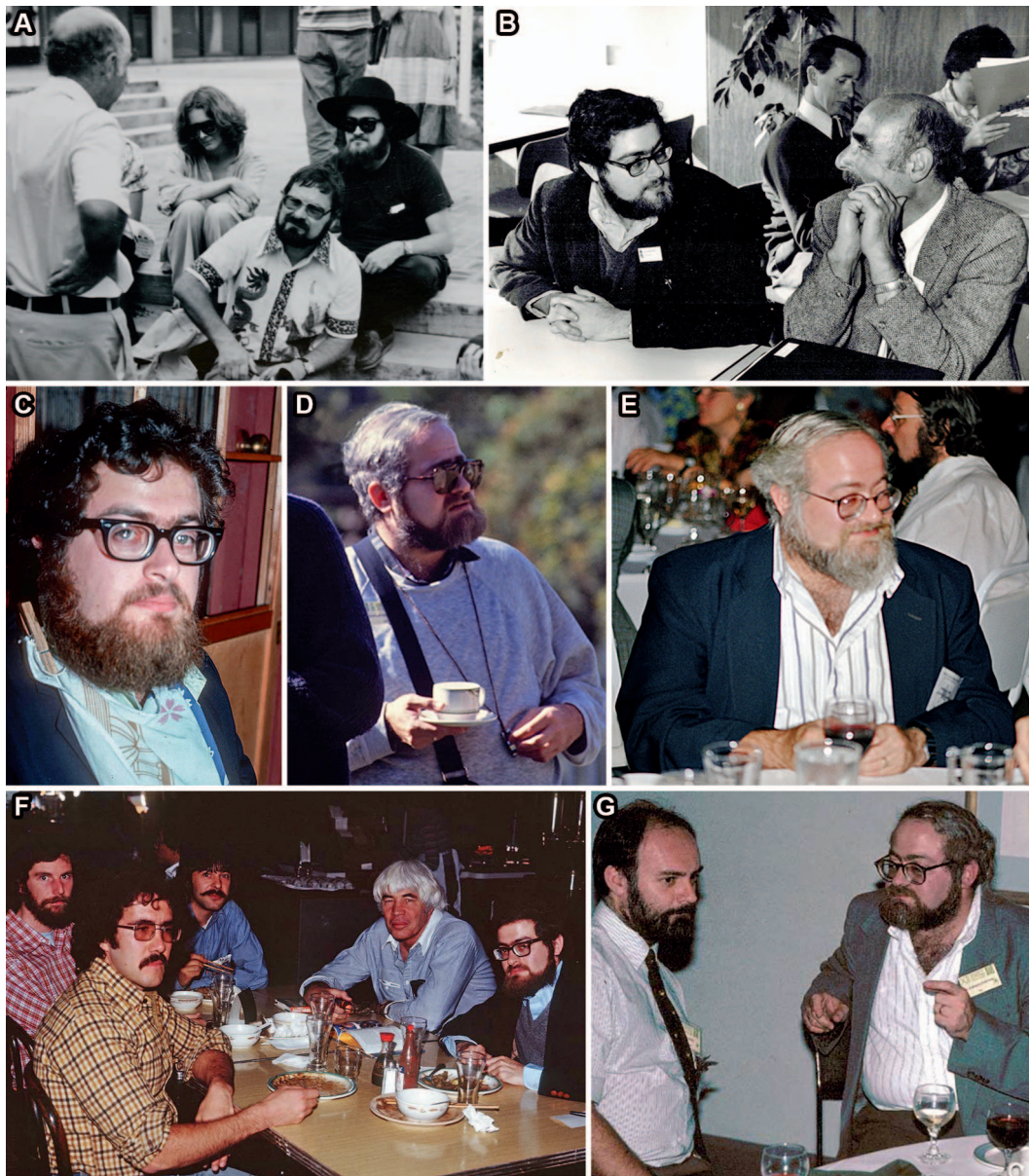


Fig. 4. Norman I. Platnick, systematic arachnologist. **A.** With Herbert Levi (left) and Pekka Lehtinen (center) at a meeting of the American Arachnological Society (AAS), Central Missouri State University, Warrensburg (1975). **B.** **C.** At a meeting of the AAS, California Academy of Sciences, San Francisco (1976), and with Herbert Levi (**B**). **D.** At the XII International Congress of Arachnology (ICA), Queensland Museum, Brisbane, Australia (1992). **E.** At the XIV ICA and 22<sup>nd</sup> Annual Meeting of the American Arachnological Society, Field Museum of Natural History, Chicago (1998). **F.** At the Dynasty Chinese Restaurant, Berkeley, CA, with (from right to left) Evert Schlinger, Warren Savary, Charles Griswold, and Leonard Vincent (1978). **G.** With Paul Selden (left) at the XII ICA (1992). Photos ©: P. Craig (**C**, **F**); L. Vincent (**D**, **E**); R. Gillespie/G. Roderick (**G**).



(hooded tick-spiders), in which he described a new genus and 12 new species. The names of many taxa express Norm's characteristically wry sense of humor, such as *Neato* Platnick, 2002, *Oreo* Platnick, 2002, *Queenvic* Platnick, 2000, *Notnops* Platnick, 1994, *Nyetenops* Platnick and Lise, 2007, *Taintnops* Platnick, 1994, *Tisentnops* Platnick, 1994, *Paradysderina righty* Platnick and Dupérré, 2011, and *Paradysderina lefty* Platnick and Dupérré, 2011. In 2005, Quentin Wheeler remarked that Norm 'is the best arachnologist of his generation, has published more monographs and nomenclatural contributions than anyone, period.'

Norm's singular contribution to arachnology, his copious descriptions of arachnids notwithstanding, is undoubtedly the *World Spider Catalog*, which he created as a unified nomenclatural and taxonomic resource, and updated annually over the course of two decades (Platnick, 2000–2020).

Work on this project began in 1986, with the untimely death of Paolo M. Brignoli, formerly at the University of Aquila, Italy. Spider students had come to depend on Brignoli's (1983) *Catalogue of the Araneae described between 1940 and 1981*, itself continuing the monumental cataloguing efforts of Roewer's (1942, 1955) *Katalog der Araneae von 1758 bis 1940* and Bonnet's (1945, 1955–1959, 1961) *Bibliographia Araneorum*, for essential guidance to the enormous taxonomic literature on spiders. Brignoli (1983) filled many of the post-Roewer gaps through 1980, with scattered coverage of later papers, and intended to issue supplements at periodic intervals until that was prevented by his departure. Fortunately, Norm accepted an invitation from the British Arachnological Society and Manchester University Press to take on the challenge of preparing the first supplement to Brignoli (1983). Over the next decade, three volumes of *Advances in Spider Taxonomy* (Platnick, 1989, 1993, 1998), collectively 2,500 pages, were published, covering the literature from 1981 through 1995 and including all synonyms, transfers, and redescriptions from 1940 to 1980. These indispensable volumes became known as the 'Platnick Catalogs.'

By the end of the 20<sup>th</sup> century it became obvious that the increasing quantity of taxonomic information on spiders could no longer be managed in printed volumes. An internet-based solution was required to handle the annual influx of over 300

taxonomic publications with descriptions of ca. 900 new species. Norm began this task with the first online version of his *World Spider Catalog* in 2000 and continued through 2014, with two updated versions per year from 2002, a total of 28 updates (Platnick, 2000–2020). The catalog was hosted at the AMNH and served as HTML files per family. Wayne Maddison recalled Norm's legendary attention to detail when, around 2013, he wrote a script to process Norm's HTML code from the *World Spider Catalog*, to generate lists of species and genera in a different format. Although Norm wrote the code by hand with a basic text editor, XyWrite, 'it was so regularly formed' that the script parsed the file 'error-free.'

The next step was taken as part of the Goblin Spider Planetary Biodiversity Inventory (PBI), when a relational database of Version 8.5 of the *World Spider Catalog*, (Platnick, 2008), prepared with the assistance of Robert J. Raven, Head of Terrestrial Biodiversity and Senior Curator at the Queensland Museum, Australia, AMNH George Willett Curator Emeritus, R. Toby Schuh, and staff from the AMNH Information Technology Department, was released as a beta version. Upon Norm's retirement in 2014, the Naturhistorisches Museum Bern, Switzerland, took over the *World Spider Catalog* and converted it to a relational database with a fully searchable bibliography of over 12,000 taxonomic citations, most with links to PDFs (World Spider Catalog, 2020). Unlike most other non-vertebrate taxa of comparable diversity, spiders now enjoy a completely up-to-date, online, species-level taxonomic database since 1757 when the first 68 spider species were described by Carl Clerck.

In recognition of his many contributions to science, and especially to arachnology, Norm was made Honorary Member of the Arachnologische Gesellschaft, the British Arachnological Society, and the International Society of Arachnology, and Fellow of the American Association for the Advancement of Science, among other honors (Table 6). He received the Pierre Bonnet Award for Devoted Service to the Advancement of Arachnology from the International Society of Arachnology in 2007. Six spider genera, *Norm-platnickia* Rix and Harvey, 2010, *Platnickia* Jocqué, 1991, *Platnickina* Koçak and Kemal, 2008, *Platnicknia* Özdikmen and Demir, 2009 (= *Modisimus* Simon, 1893), *Platnickopoda* Jäger, 2020, and *Platnick* Marusik and Fomichev, 2020,



Fig. 5. Norman I. Platnick, educator and friendly neighborhood spider-man. **A.** At the opening of the AMNH *Spiders Alive!* exhibition with *The Amazing Spider-Man* actor, Andrew Garfield (2012). **B.** At the AMNH with *Spider-Man* actor, Tobey Maguire (2007). **C, D.** At home in Bay Shore, NY, with his son, Will Platnick (1983, **C**; 1985, **D**). **E.** At the AMNH *Spiders Alive!* exhibition with spidermen from the Broadway show, *Spider-Man Turn Off the Dark* (2012). **F.** Live spider display at Brook Avenue Elementary School, Bay Shore, NY, where his son, Will, attended school and his wife, Nancy Platnick, worked for 20 years (2008). **G.** Beside spider artwork (2011). **H.** With his daughter-in-law, Rebecca Ehrlich, sitting on model trapdoor spider, *Cyclocosmia* Ausserer, 1871, at the AMNH *Spiders Alive!* exhibition (2012). Photos ©: R. Mickens/AMNH (**A, E**); D. Finnin/AMNH (**B**); N. I. Platnick/W. D. Platnick (**C, D, F, H**).

and 52 species of spiders, other arachnids, and a millipede are named in his honor (Prendini, 2020c).

Norm's international fieldwork (Fig. 3A–C, E), which focused on temperate austral forests, and the realization that for many taxa, the temperate zone is more biodiverse than the tropics (Platnick, 1991a, 1992), made him keenly aware of the loss of biodiversity caused by human-induced habitat destruction and degradation. Describing in 2014 his experiences in Chile, he recalled with shock and sadness returning to field sites, years later, to discover that 'where there used to be a forest ... it's no longer there.' From the 1990's onwards, as part of a growing concern for the threats facing biodiversity, Norm became actively involved in initiatives to address the 'taxonomic impediment' by accelerating the pace of species discovery and description, including programs such as Systematics Agenda 2000: Charting the Biosphere (Platnick, 1999; Wheeler et al., 2012), and received major grants implementing automated methods of species identification and description, e.g., SPIDA-web (Russell et al., 2007), and training the next generation of taxon specialists, e.g., the NSF Partnerships for Enhancing Expertise in Taxonomy (PEET) program. This vision culminated in the Planetary Biodiversity Inventories (PBI) and Revisionary Syntheses in Systematics programs which he co-developed during his tenure as Program Director for Biodiversity Surveys and Inventories in the NSF Division of Environmental Biology (2002–2003).

In 2006, Norm put his approach to targeting megadiverse groups (Platnick, 1999) into practice on a global scale with his PBI grant on the megadiverse, microdistributed goblin spider family Oonopidae Simon, 1890 involving, for the first time in history, 54 collaborating arachnologists from 19 institutions in 12 countries, dedicated to advancing the systematics of Oonopidae, worldwide. Over the course of 11 years, using custom-built cyberinfrastructure, the rate of species description increased in a manner unprecedented for any spider family: 1,056 new spider species were described in 103 papers and 5,344 pages, increasing global spider diversity by 2.5% and moving Oonopidae from the 21<sup>st</sup> to the 8<sup>th</sup> most speciose family of spiders. In the Neotropical Region alone, where only 212 oonopid species were known when the project began, more than double the number of species were described than

in the preceding 127 years (Santos et al., 2017). The success of the Goblin Spider PBI, as it became known, has been attributed to the combination of detailed global planning and division of labor among team members, which facilitated specimen sharing and access to material, along with the implementation of cybertaxonomic tools for generating automated descriptions, keys and distribution maps from centralized online-accessible databases. These procedures resulted in intensive sampling of existing spider collections, complemented by freshly collected material. Some descriptions of new taxa by project collaborators were based on unsorted and unidentified specimens already available in museum collections, particularly specimens collected in spider diversity inventories, but many new species were discovered by sampling poorly explored and hyperdiverse places for the first time. For example, a single expedition to Ecuador in 2009 resulted in the discovery of three new genera and 42 new species (Santos et al., 2017).

In between his productive research program, Norm took an active role in serving the scientific communities of arachnologists and systematic biologists, and training the next generation of systematic arachnologists (Figs. 3, 4), throughout the course of his career. He was a charter member of the American Arachnological Society (1972) and served as Membership Secretary (1976–2002) and editorial board member for the *Journal of Arachnology* (1974–2013), as well as Vice President (1986–1989) and President (1995–1998) of the Centre International de Documentation Arachnologique (which later became the International Society of Arachnology). He was founding fellow (1980) and President (1990–1992) of the Willi Hennig Society, and served as an editor for *Systematic Zoology* (1976–1982) and *Cladistics* (1988–2004). In addition to his role as fellow, president or councilor of scientific societies, and his service on copious editorial boards and scientific panels (Tables 2, 3), Norm leaves a rich legacy in education. He delivered almost 100 scientific lectures in the U.S. and abroad (Prendini, 2020a), and advised or served on the committees of over 20 graduate students and postdoctoral fellows from countries including Argentina, Australia, Germany, Peru and Russia (Table 4; Figs. 3D, 4F), many of whom went on to illustrious careers in arachnology and systematics, around the world.





Fig. 6. Norman I. Platnick's 'other life'. **A.** Holding a turnip in Bay Shore, NY (2011). **B, C.** At home in Bay Shore with his cats, Nutmeg (2012) (**B**) and Murphy (2008) (**C**). **D.** Searching for art at Periodyssey, Northampton, MA, dealer in American historical prints and magazines (2004). **E, H.** With stands of his *Enchantment Ink* books at Allentown Paper Show, Allentown, PA (2007). **F, G.** At home in Bay Shore with part of his wife, Nancy Platnick's collection of over 300 vintage electric mixers (2013). Photos ©: N. I. Platnick/W. D. Platnick (**A–E, H**); M. Kirby Smith/NY Times (**F, G**).

The original spider man, Norm promoted the old adage ‘if you wish to live and thrive, let a spider run alive’ via diverse media, including the highly successful *Spiders Alive!* exhibition (2012–2013, and again in 2015; Fig. 5A, B, E, H), two children’s books on spiders (Platnick, 1995, 2004), several popular magazine articles, and online videos, such as *Seeking Spiders – Biodiversity on a Different Scale* (Fig. 3E), where he noted: ‘if we wish to conserve as much biodiversity as possible, then we need to pay attention not just to the things that are easy to see, but also to the ones that are not so easy to see and tell us much more about the planet.’ This, indeed, was Norm’s rationale for undertaking a global inventory of the minute Oonopidae, which typically measure less than 2 mm in length and have, on average, the smallest distributional ranges, per species, of any group of spiders. The microdistributions of goblin spiders renders them extraordinarily valuable for defining areas of endemism (Platnick, 1991b), harboring species that occur nowhere else; for understanding the relationships among those species and the history of the areas they inhabit (on time scales ranging from continental drift to relatively recent climate change); and, by extension, for identifying areas of conservation priority. The completion of the Goblin Spider PBI and successful transition of the *World Spider Catalog* to its new home, as well as the recent publication of a full color volume, *Spiders of the World: A Natural History* (Platnick, 2020), coauthored with long-term arachnologist collaborators, Rudy Jocqué (formerly at the Musée Royal de l’Afrique Centrale, Tervuren, Belgium), Gustavo Hormiga (George Washington University, Washington, DC), Robert J. Raven (Queensland Museum, Brisbane, Australia), Martín J. Ramírez (Museo Argentino de Ciencias Naturales, Buenos Aires) and Peter Jäger (Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt, Germany), several of Norm’s former trainees among them, are fitting conclusions to a life’s work researching and disseminating knowledge of the incredible diversity of spiders.

According to Will Platnick, Norm ‘had three passions in life: my mother, spiders and collecting.’ In his spare time, Norm enjoyed ‘another life’ as an art aficionado, the origins of which, like his obsession with spiders, were ‘entirely Nancy’s fault!’ When the family moved to Long Island, Nancy began visiting yard sales, antique shops

and shows, collecting vintage (pre-1967) eggbeaters, electric mixers and other mechanical kitchen devices. She ultimately acquired over 300 (Fig. 6F, G). Considered by many to be ‘the godmother of the current mixer movement,’ Nancy was a member of Kooks (Kollectors Of Old Kitchen Stuff) and started an online news group called WACEM (We Actually Collect Electric Mixers) in 1999, which has grown to over 2,400 active members. While frequenting antique shops in search of eggbeaters and mixers with his wife, Norm realized he needed something of his own to hunt for. He has traced his interest in the illustration art of magazine covers, advertisements, and articles from America’s ‘Golden Age of Illustration,’ ca. 1905–1920 (Parks, 2006; Platnick, 2013), back to a Maxfield Parrish print he and Nancy purchased for their Manhattan apartment in the 1970’s. Introduced to the work of Coles Phillips through advertisements from old magazines discovered in Nancy’s parents’ house, Norm added another artist to his study and collections. While learning about Phillips, Norm discovered there were dozens of other artists from the period who did equally beautiful work, and immersed himself deeply into collecting and researching the ones he liked, eventually developing his own collection of over 6,500 pieces through visits to dealers and shows (Fig. 6D). Between 1998 and 2020, Norm wrote 27 full-color books and three articles on the work of various artists from this period (Platnick, 2014–2020), a labor of love, demanding considerable time and energy to publish under the imprint, Enchantment Ink (Fig. 6E, H), and was planning ‘at least as many more.’ Norm’s approach to his art books adapted his methods from the *World Spider Catalog*. Each book, periodically updated and assigned a new version number, synthesized all that is known about the printed work of its subject, including full-color images of all known calendars and prints, along with the magazine items (covers, illustrations, and ads), book illustrations, fans, sheet music, jigsaw puzzles, postcards, menus, tradecards, leaflets, needlecases, packets, blotters, boxes, posters, store displays, and die-cuts featuring their work, as applicable and available. Norm also intended ‘to produce the book on mixers Nancy always wanted to do.’

Norm’s generous personality, fierce intellect, and indomitable can-do approach won friends and admirers across the globe. His motto, ‘The

best is none too good,' long hanging on his office wall and still seen on his Facebook page, speaks volumes about his attitude to his pursuits. When Norm first moved to New York, he and Nancy rented a ground floor apartment, on what was then a seedy West 80<sup>th</sup> Street, a block from his office at the AMNH. His friend and colleague, R. Toby Schuh, recalls 'many a day when Norm would come to the AMNH at 2 or 3 am, do several hours' work, and return home to have breakfast with his beloved wife before she left for work, returning to complete what for most would be a whole day's effort.'

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#### LITERATURE CITED

- Bonnet, P. 1945. *Bibliographia Araneorum*. Analyse méthodique de toute la littérature aranéologique jusqu'en 1939. Tome I. Les Frères Douladoure, Toulouse, 832 pp.
- Bonnet, P. 1955. *Bibliographia Araneorum*. Analyse méthodique de toute la littérature aranéologique jusqu'en 1939. Tome II. Systématique des araignées (Étude par ordre alphabétique) [1re partie: A–B]. Les Frères Douladoure, Toulouse, pp. 1–918.
- Bonnet, P. 1956. *Bibliographia Araneorum*. Analyse méthodique de toute la littérature aranéologique jusqu'en 1939. Tome II. Systématique des araignées (Étude par ordre alphabétique) (2me partie: C–F). Les Frères Douladoure, Toulouse, pp. 919–1926.
- Bonnet, P. 1957. *Bibliographia Araneorum*. Analyse méthodique de toute la littérature aranéologique jusqu'en 1939. Tome II. Systématique des araignées (Étude par ordre alphabétique) (3me partie: G–M). Les Frères Douladoure, Toulouse, pp. 1927–3026.
- Bonnet, P. 1958. *Bibliographia Araneorum*. Analyse méthodique de toute la littérature aranéologique jusqu'en 1939. Tome II. Systématique des araignées (Étude par ordre alphabétique) (4me partie: N–S). Les Frères Douladoure, Toulouse, pp. 3027–4230.
- Bonnet, P. 1959. *Bibliographia Araneorum*. Analyse méthodique de toute la littérature aranéologique jusqu'en 1939. Tome II. Systématique des araignées (Étude par ordre alphabétique) (5me partie: T–Z). Les Frères Douladoure, Toulouse, pp. 4231–5058.
- Bonnet, P. 1961. *Bibliographia Araneorum*. Analyse méthodique de toute la littérature aranéologique jusqu'en 1939. Tome III. Index alphabétiques, résultats – conclusions, considérations diverses. Les Frères Douladoure, Toulouse, 591 pp.
- Brignoli, P. M. 1983. A Catalogue of the Araneae described between 1940 and 1981. Manchester University Press, Manchester, U.K., 755 pp.
- Forster, R. R. and N. I. Platnick. 1984. A review of the archaetid spiders and their relatives, with notes on the limits of the superfamily Palpimanoidea (Arachnida, Araneae). *Bulletin of the American Museum of Natural History* 178: 1–106.
- Forster, R. R., N. I. Platnick and J. A. Coddington. 1990. A proposal and review of the spider family Synotaxidae (Araneae, Araneoidea), with notes on theridiid interrelationships. *Bulletin of the American Museum of Natural History* 193: 1–116.
- Griswold, C. E., J. A. Coddington, N. I. Platnick and R. R. Forster. 1999. Towards a phylogeny of entelegyne spiders (Araneae, Araneomorphae, Entelegynae). *Journal of Arachnology* 27(1): 53–63.
- Griswold, C. E., M. J. Ramírez, J. A. Coddington and N. I. Platnick. 2005. Atlas of phylogenetic data for entelegyne spiders (Araneae: Araneomorphae: Entelegynae) with comments on their phylogeny. *Proceedings California Academy Sciences*, Series 4, 56(Suppl. II): 1–324, pl. 1–220.
- Harper, C. W., Jr and N. I. Platnick. 1978. Phylogenetic and cladistic hypotheses: A debate. *Systematic Zoology* 27(3): 354–362.
- Hennig, W. 1950. *Grundzüge einer Theorie der phylogenetischen Systematik*. Deutscher Zentralverlag, Berlin, iv + 370 pp.
- Hennig, W. 1966 [reprinted 1979]. *Phylogenetic Systematics*, translated by D. D. Davis and R. Zangerl. University of Illinois Press, Urbana, xv + 263 pp.
- Hull, D. L. 1988. *Science as a Process. An Evolutionary Account of the Social and Conceptual Development of Science*. University of Chicago Press, Chicago and London, 586 pp.
- Lipscomb, D. L., N. I. Platnick and Q. D. Wheeler. 2003. The intellectual content of taxonomy: A comment on DNA taxonomy. *Trends in Ecology and Evolution* 18(2): 65–66.
- Nelson, G. and N. I. Platnick. 1978. The perils of plesiomorphy: Widespread taxa, dispersal, and phenetic biogeography. *Systematic Zoology* 27(4): 474–477.
- Nelson, G. and N. I. Platnick. 1980a. A vicariance approach to historical biogeography. *BioScience* 30(5): 339–343.
- Nelson, G. and N. I. Platnick. 1980b. Multiple branching in cladograms: Two interpretations. *Systematic Zoology* 29(1): 86–91.



- Nelson, G. and N. I. Platnick. 1981. Systematics and Biogeography: Cladistics and Vicariance. Columbia University Press, New York, xi + 567 pp.
- Nelson, G. and N. I. Platnick. 1991. Three-taxon statements: A more precise use of parsimony? *Cladistics* 7(4): 351–366.
- Platnick, N. I. 1974. Scanning electron microscopy in spider systematics. Meeting of the American Arachnological Society, Eastern Section, Lynchburg College, Lynchburg, VA, U.S.A. [oral presentation]
- Platnick, N. I. 1976a. Drifting spiders or continents?: Vicariance biogeography of the spider subfamily Laroniinae (Araneae: Gnaphosidae). *Systematic Zoology* 25(2): 101–109.
- Platnick, N. I. 1976b. Concepts of dispersal in historical biogeography. *Systematic Zoology* 25(3): 294–295.
- Platnick, N. I. 1977a. Paraphyletic and polyphyletic groups. *Systematic Zoology* 26(2): 195–200.
- Platnick, N. I. 1977b. Cladograms, phylogenetic trees, and hypothesis testing. *Systematic Zoology* 26(4): 438–442.
- Platnick, N. I. 1977c. The hypochiloid spiders: A cladistic analysis, with notes on the Atypoidea (Arachnida, Araneae). *American Museum Novitates* 2627: 1–23.
- Platnick, N. I. 1978a. Adaptation, selection, and falsifiability. *Systematic Zoology* 27(3): 347–348.
- Platnick, N. I. 1978b. Classifications, historical narratives, and hypotheses. *Systematic Zoology* 27(3): 365–369.
- Platnick, N. I. 1978c. Gaps and prediction in classification. *Systematic Zoology* 27(4): 472–474.
- Platnick, N. I. 1979. Philosophy and the transformation of cladistics. *Systematic Zoology* 28(4): 537–546.
- Platnick, N. I. 1981a. The progression rule or progress beyond rules in biogeography, pp. 144–150 in G. Nelson and D. E. Rosen (eds), *Vicariance Biogeography: A Critique*. Columbia University Press, New York.
- Platnick, N. I. 1981b. Widespread taxa and biogeographic congruence, pp. 223–227 in V. A. Funk and D. Brooks (eds), *Advances in Cladistics: Proceedings of the First Meeting of the Willi Hennig Society*. New York Botanical Garden, New York.
- Platnick, N. I. 1982. Defining characters and evolutionary groups. *Systematic Zoology* 31(3): 282–284.
- Platnick, N. I. 1985. Philosophy and the transformation of cladistics revisited. *Cladistics* 1(1): 87–94.
- Platnick, N. I. 1986. Taxonomic methods and “evolutionary cladistics.” *Cladistics* 2(3): 375–377.
- Platnick, N. I. 1989. *Advances in Spider Taxonomy 1981–1987: A Supplement to Brignoli’s A Catalogue of the Araneae described between 1940 and 1980*. [ed. P. Merrett] Manchester University Press, Manchester, U.K., vii + 673 pp.
- Platnick, N. I. 1990. Spinneret morphology and the phylogeny of ground spiders (Araneae, Gnaphosidae). *American Museum Novitates* 2978: 1–42.
- Platnick, N. I. 1991a. Patterns of biodiversity: Tropical vs temperate. *Journal of Natural History* 25(5): 1083–1088.
- Platnick, N. I. 1991b. On areas of endemism. *Australian Systematic Botany* 4(1): 1–2.
- Platnick, N. I. 1992. Patterns of biodiversity, pp. 15–24 in N. Eldredge (ed.), *Systematics, Ecology, and the Biodiversity Crisis*. Columbia University Press, New York.
- Platnick, N. I. 1993. *Advances in Spider Taxonomy 1988–1991, with Synonymies and Transfers 1940–1980*. [ed. P. Merrett] The New York Entomological Society, New York, v + 846 pp.
- Platnick, N. I. 1995. *Tarantulas Are Spiders*. Mondo Publishing, St Paul, MN, 8 pp.
- Platnick, N. I. 1998. *Advances in Spider Taxonomy 1992–1995, with Redescriptions 1940–1980*. [ed. P. Merrett] The New York Entomological Society, New York, v + 976 pp.
- Platnick, N. I. 1999. Dimensions of biodiversity: Targeting megadiverse groups, pp. 33–52 in J. Cracraft and F. T. Grifo (eds), *The Living Planet in Crisis: Biodiversity Science and Policy*. Columbia University Press, New York.
- Platnick, N. I. 2000–2020. The World Spider Catalog. [ed. P. Merrett and H. D. Cameron] American Museum of Natural History. <https://research.amnh.org/iz/spiders/catalog> doi:10.5531/db.iz.0001
- Platnick, N. I. 2004. *How Many Legs?* Mondo Publishing, St Paul, MN, 16 pp.
- Platnick, N. I. 2008. The World Spider Catalog, Version 8.5. [ed. P. Merrett and H. D. Cameron] American Museum of Natural History. [https://research.amnh.org/iz/spiders/catalog\\_8.5/index.html](https://research.amnh.org/iz/spiders/catalog_8.5/index.html) doi:10.5531/db.iz.0001
- Platnick, N. I. 2012. The poverty of the PhyloCode: A reply to de Queiroz and Donoghue. *Systematic Biology* 61(2): 360–361.
- Platnick, N. I. 2013a. The information content of taxon names: A reply to de Queiroz and Donoghue. *Systematic Biology* 62(1): 175–176.
- Platnick, N. I. 2013b. America’s “Golden Age of Illustration.” *Fox Tales: A Quarterly Newsletter of the R. Atkinson Fox Society*. [February 2013]
- Platnick, N. I. 2014–2020. *Enchantment Ink*. <http://www.enchantmentink.com>
- Platnick, N. I. (ed., contributions by R. Jocqué, G. Hormiga, R. J. Raven, M. J. Ramírez and P. Jäger) 2020. *Spiders of the World: A Natural History*. Princeton University Press, Princeton, NJ, 240 pp. / Ivy Press, Brighton, U.K., 256 pp.
- Platnick, N. I., N. Abraham, F. Álvarez-Padilla, D. Andriamalala, B. C. Baehr, L. Baert, A. B. Bonaldo, A. D. Brescovit, R. Jocqué, Y. Kranz-Baltensperger, C. Kropf, R. Ott, M. J. Ramírez, R. J. Raven, C. A. Rheims, G. R. S. Ruiz, A. J. Santos, A. Saucedo, P. Sierwald, T. Szűts, D. Ubick and X.-P. Wang. 2012. Tarsal organ morphology and the phylogeny of goblin spiders (Araneae, Oonopidae), with notes on basal genera. *American Museum Novitates* 3736: 1–52.

- Platnick, N. I. and H. D. Cameron. 1977. Cladistic methods in textual, linguistic, and phylogenetic analysis. *Systematic Zoology* 26(4): 380–385.
- Platnick, N. I., J. A. Coddington, R. R. Forster and C. E. Griswold. 1991a. Spinneret morphology and the phylogeny of haplogyne spiders (Araneae, Araneomorphae). *American Museum Novitates* 3016: 1–73.
- Platnick, N. I. and E. S. Gaffney. 1978a. Evolutionary biology: A Popperian perspective. *Systematic Zoology* 27(1): 137–141.
- Platnick, N. I. and E. S. Gaffney. 1978b. Systematics and the Popperian paradigm. *Systematic Zoology* 27(3): 381–388.
- Platnick, N. I. and W. J. Gertsch. 1976. The suborders of spiders: A cladistic analysis (Arachnida, Araneae). *American Museum Novitates* 2607: 1–15.
- Platnick, N. I., C. E. Griswold and J. A. Coddington. 1991b. On missing entries in cladistic analysis. *Cladistics* 7(4): 337–343.
- Platnick, N. I., C. J. Humphries, G. Nelson and D. M. Williams. 1996. Is Farris optimization perfect?: Three-taxon statements and multiple branching. *Cladistics* 12(3): 243–252.
- Platnick, N. I. and G. Nelson. 1978. A method of analysis for historical biogeography. *Systematic Zoology* 27(1): 1–16.
- Platnick, N. I. and G. Nelson. 1984. Composite areas in vicariance biogeography. *Systematic Zoology* 33(3): 328–335.
- Platnick, N. I. and L. F. Marcus. 1979. The 12<sup>th</sup> annual numerical taxonomy conference. *Systematic Zoology* 28(2): 232–238.
- Platnick, N. I. and R. J. Raven. 2013. Spider systematics: Past and future. *Zootaxa* 3683(5): 595–600. doi:10.11646/zootaxa.3683.5.8
- Platnick, N. I. and D. E. Rosen. 1987. Popper and evolutionary novelties. *History and Philosophy of the Life Sciences* 9(1): 5–16.
- Platnick, N. I. and Q. D. Wheeler. 2000. A defense of the phylogenetic species concept (*sensu* Wheeler and Platnick), pp. 185–197 in Q. D. Wheeler and R. Meier (eds), *Species Concepts and Phylogenetic Theory: A Debate*. Columbia University Press, New York.
- Prendini, L. 2020a. Bibliography of Norman I. Platnick. *Entomologica Americana* 126(1–4): 22–57.
- Prendini, L. 2020b. Arachnida (Araneae, Ricinulei) described by Norman I. Platnick. *Entomologica Americana* 126(1–4): 58–100.
- Prendini, L. 2020c. Taxa dedicated to Norman I. Platnick. *Entomologica Americana* 126(1–4): 101–107.
- Roewer, C. F. 1942. Katalog der Araneae von 1758 bis 1940. 1. Band (Mesothelae, Orthognatha, Labidognatha: Dysderaeformia, Scytodiformia, Pholciformia, Zodariiformia, Hersiliaeformia, Argypiformia). *Natura, Buchhandlung für Naturkunde und exakte Wissenschaften Paul Budy, Bremen*, 1040 pp.
- Roewer, C. F. 1955. Katalog der Araneae von 1758 bis 1940, bzw. 1954. 2. Band, Abt. a (Lycosaeformia, Dionycha [excl. Salticiformia]). 2. Band, Abt. b (Salticiformia, Cribellata) (Synonyma-Verzeichnis, Gesamtindex). Institut royal des Sciences naturelles de Belgique, Bruxelles, 1751 pp.
- Russell, K. N., M. T. Do, J. C. Huff and N. I. Platnick. 2007. Introducing SPIDA-web: Wavelets, neural networks, and Internet accessibility in an image-based automated identification system, pp. 131–152 in N. MacLeod (ed.), *Automated Taxon Identification in Systematics: Theory, Approaches, and Applications*. Systematics Association Special Volume, Taylor & Francis, London.
- Santos, A. J., A. D. Brescovit, M. de Oliveira-Tomasi, P. Russo and U. Oliveira. 2017. Curves, maps and hotspots: The diversity and distribution of araneomorph spiders in the neotropics, pp. 1–28 in C. Viera and M. O. Gonzaga (eds), *Behavior and Ecology of Spiders. Contributions from the Neotropical Region*. Springer International, Cham, Switzerland.
- Wheeler, Q. D., S. Knapp, D. W. Stevenson, J. Stevenson, S. D. Blum, B. M. Boom, G. G. Borisy, J. L. Buizer, M. R. De Carvalho, A. Cibrán, M. J. Donoghue, V. Doyle, E. M. Gerson, C. H. Graham, P. Graves, S. J. Graves, R. P. Guralnick, A. L. Hamilton, J. Hanken, W. Law, D. L. Lipscomb, T. E. Lovejoy, H. Miller, J. S. Miller, S. Naeem, M. J. Novacek, L. M. Page, N. I. Platnick, H. Porter-Morgan, P. H. Raven, M. A. Solis, A. G. Valdecasas, S. Van Der Leeuw, A. Vasco, N. Vermeulen, J. Vogel, R. L. Walls, E. O. Wilson and J. B. Woolley. 2012. Mapping the biosphere: Exploring species to understand the origin, organization and sustainability of biodiversity. *Systematics and Biodiversity* 10(1): 1–20.
- Wheeler, Q. D. and N. I. Platnick. 2000a. The phylogenetic species concept (*sensu* Wheeler and Platnick), pp. 55–69 in Q. D. Wheeler and R. Meier (eds), *Species Concepts and Phylogenetic Theory: A Debate*. Columbia University Press, New York.
- Wheeler, Q. D. and N. I. Platnick. 2000b. A critique from the Wheeler and Platnick phylogenetic species concept perspective: Problems with alternative concepts of species, pp. 133–145 in Q. D. Wheeler and R. Meier (eds), *Species Concepts and Phylogenetic Theory: A Debate*. Columbia University Press, New York.
- Wheeler, W. C., J. A. Coddington, L. M. Crowley, D. Dimitrov, P. A. Goloboff, C. E. Griswold, G. Hormiga, L. Prendini, M. J. Ramírez, P. Sierwald, L. M. Almeida-Silva, F. Álvarez-Padilla, M. A. Arnedo, L. R. Benavides, S. P. Benjamin, J. E. Bond, C. J. Griswold, E. Hasan, M. Hedin, M. A. Izquierdo, F. M. Labarque, J. Ledford, L. Lopardo, W. P. Maddison, J. A. Miller, L. N. Piacentini, N. I. Platnick, D. Polotow, D. Silva-Dávila, N. Scharff, T. Szűts, D. Ubick, C. Vink, H. M. Wood and J. X. Zhang. 2017. The spider tree of life: Phylogeny of Araneae based on target-gene analyses from an extensive taxon sampling. *Cladistics* 33(6): 576–616.
- World Spider Catalog. 2020. World Spider Catalog, Version 21.0. Naturhistorisches Museum Bern, Switzerland. <http://wsc.nmbe.ch>. doi:10.24436/2 Accessed October 2020.

## Appendix

### Sources and Resources

American Museum of Natural History. 2006–2020. Planetary Biodiversity Inventory: The Spider Family Oonopidae. <http://research.amnh.org/oonopidae>. Accessed May 2020.

American Museum of Natural History. 2012. Profile: Norman Platnick. 27 July 2012. <https://www.youtube.com/watch?v=DZWlIdriEo0>. Accessed May 2020.

American Museum of Natural History. 2012. Science Bulletins: Seeking Spiders—Biodiversity on a Different Scale. 4 October 2012. <https://www.youtube.com/watch?v=OITeTrLu-PM>. Accessed May 2020.

American Museum of Natural History. 2012. Spiders Q&A with Curator Norman Platnick. 9 November 2012. <https://www.youtube.com/watch?v=5oHacvRWYrg>. Accessed May 2020.

American Museum of Natural History. 2014. Expedition Report: Norman Platnick in Chile. <https://soundcloud.com/amnh/expedition-report-norman-platnick-in-chile>. Accessed May 2020.

American Museum of Natural History. 2014. Norman I. Platnick, Curator Emeritus, Division of Invertebrate Zoology. <https://www.amnh.org/research/staff-directory/norman-i.-platnick>. Accessed May 2020.

American Museum of Natural History. 2015. Spiders Alive! July 4, 2015–November 29, 2015. <https://www.amnh.org/exhibitions/spiders-alive>. Accessed May 2020.

American Museum of Natural History. 2020. Norman I. Platnick, *In Memoriam* 1951–2020. <https://www.amnh.org/research/staff-directory/norman-i.-platnick/in-memoriam>. Accessed May 2020.

Anon. 1968. Genius, 16, to teach at Michigan State. *Kansas City Times* (Kansas City, MO) 14 September 1968, p. 20.

Anon. 2018. Friendly neighborhood arachnologist. *Concord University Magazine* Fall 2018: 21–27. <https://issuu.com/concord.university/docs/web-cumagazinefall2018>

Arizona State University. 2008. Spiderman meets Spider-Man. Podcast Interview with Norman Platnick. *Ask A Biologist Podcast*, Vol. 31, 23 February 2008. <https://askabiologist.asu.edu/podcasts/spiderman-meets-spider-man>

AttendNYC. 2014. Jul 4 Sat–Nov 29 Sun AMNH Spiders Alive! AttendNYC 27 June 2014. <https://www.attendnyc.com/2014/06/27/jul-4-sat-nov-29-sun-amnh-spiders-alive>

Beaver County Times (Beaver, PA) 20 July 1964, pp. 2, 22, 28.

Bolzern, A. 2020. Obituary. Norman I. Platnick (1951–2020). *Arachnologische Mitteilungen* 60: ii–iii.

Bratburd, R. 2014. Spiders Get Return Show at American Museum of Natural History. *The Wall Street Journal* 4 July 2014. <https://www.wsj.com/articles/spiders-get-return-show-at-american-museum-of-natural-history-1404521492>

Facebook. Norman Platnick. <https://www.facebook.com/norman.platnick>. Accessed May 2020.

Fountain, H. 2011. Specialized Windows on the Natural World. *The New York Times* 7 July 2011. [http://www.nytimes.com/2011/07/12/science/12museum.html?\\_r=1](http://www.nytimes.com/2011/07/12/science/12museum.html?_r=1)

Fountain, H. 2012. Sensitivity training for eight-legged exhibits. *The New York Times* March 14, 2012. <https://www.nytimes.com/2012/03/15/arts/artsspecial/spiders-alive-at-the-natural-history-museum.html>

Francke, O.F. 2020. Farewell to a good old friend! ¡Adiós a un gran viejo amigo! *Boletín de la Asociación Mexicana de Sistemática de Artrópodos (AMXSA)* 4(1): 4–6.

Gardner, R., Jr. 2012. Warming up to spiders. *The Wall Street Journal* 22 August 2012. <https://www.wsj.com/articles/SB1000087239639044427040457760546363280788> and 23 August 2012. <http://www.ralphgardner.com/warming-up-to-spiders>

Kumar, M. 2005. Scientist at work - Norman Platnick. The exciting adventures of spider man. *The New York Times* 25 October, 2005. <https://www.nytimes.com/2005/10/25/science/the-exciting-adventures-of-spider-man.html>

Li, S. 2020. Dr. Norman I. Platnick, *In Memoriam* (1951–2020). *Acta Arachnologica Sinica* 29(1): 1. [Chinese]

LinkedIn. Norman Platnick. <https://www.linkedin.com/in/norman-platnick-72582b72>. Accessed May 2020.

Maddison, W. 2020. Norman Platnick 1951–2020. Reflections on a spider's eyes. Discovering spiders, evolutionary history, and the world. 12 April 2020 <https://waynemaddison.wordpress.com/2020/04/12/norman-platnick-1951-2020>

Marusik, Y. M. 2020. Obituary. Norman Ira Platnick (1951–2020). *Arthropoda Selecta* 29(2): 293–296. [Russian]

Morgantown Post (Morgantown, WV) 16 July 1964, p. 20.

Murphy, K. 2013. For some, an appliance; for others, art. *The New York Times* 15 October 2013. <https://www.nytimes.com/2013/10/16/dining/for-some-an-appliance-for-others-art.html>

Museo Nacional de Historia Natural, Santiago, Chile. 2020. En memoria de Norman Platnick (1951–2020). 20 April 2020. <https://www.mnhn>



- gob.cl/sitio/Contenido/Noticias/95263: En-memoria-de-Norman-Platnick-1951-2020. Accessed May 2020.
- Parks, J. A. 2006. The Golden Age of American Illustration. *American Artist* 70(766): 24.
- Pesce, N. L. 2012. NYC's real-life spider man. *New York Daily News* 26 June 2012. <https://www.pressreader.com/usa/new-york-daily-news/20120626/282634619705617>
- Platnick, N. I. 2000–2020. The World Spider Catalog. [ed. P. Merrett and H. D. Cameron] American Museum of Natural History. <https://research.amnh.org/iz/spiders/catalog> doi:10.5531/db.iz.0001
- Platnick, N. I. 2014–2020. Enchantment Ink. <http://www.enchantmentink.com>
- Prendini, L. 2020. Dr Norman I. Platnick (1951–2020). 8 April 2020. Updated 21 May 2020. <https://www.amnh.org/content/download/310641/4897216/file/Norman+I.+Platnick+1951-2020+IZ+website+V2.pdf>
- Prendini, L. 2020. Tribute to a titan. *Norman Platnick* (30 December 1951 – 8 April 2020). *The Spider Club News* 36(1): 22–24.
- Prendini, L. 2020. Dr. Norman I. Platnick (1951–2020). *Boletín de la Asociación Mexicana de Sistemática de Artrópodos (AMXSA)* 4(1): 2–4.
- Prendini, L. 2020. In Memory of Dr. Norman I. Platnick '68. Curator Emeritus at the American Museum of Natural History. *Concord University Magazine* Spring 2020: 76–77. <https://indd.adobe.com/view/8370b742-722e-4b2c-bf6a-29f2ef4e65d4>
- Prendini, L. 2020. Norman Ira Platnick (1951–2020). *Arachnology* 18(5): 507–516.
- Ray, C. C. 2020. Q & A. Web crawlers. *The New York Times* 13 September, 2010. <https://www.nytimes.com/2010/09/14/science/14qna.html>
- Reading Eagle (Reading, PA) 29 November 1964, p. 58.
- ResearchGate. Norman I. Platnick. [https://www.researchgate.net/profile/Norman\\_Platnick](https://www.researchgate.net/profile/Norman_Platnick). Accessed May 2020.
- Song, D.-X. 1985. Dr. Platnick, an American taxonomist, came to give lectures. *Chinese Journal of Zoology* 1: 56. [Chinese] DOI: 10.13859/j.cjz.1985.01.021
- Schwartz, J. 2020. Norman Platnick, the 'real Spider-Man,' is dead at 68. *The New York Times* 17 April 2020 [updated 23 April 2020]. <https://www.nytimes.com/2020/04/17/science/earth/norman-platnick-the-real-spider-man-is-dead-at-68.html>
- The Milwaukee Journal (Milwaukee, WI) 19 June 1968, p. 138.
- The News-Dispatch (Jeanette, PA) 13 November 1964, p. 16.
- The News-Dispatch (Jeanette, PA) 18 November 1964, p. 19.
- The Washington Observer (Washington, PA) 28 November 1964, p. 7.
- The Willi Hennig Society. Norman Platnick – 1951–2020. <https://cladistics.org/2020/04/10/norman-platnick-1951-2020>. Accessed May 2020.
- Wikipedia. 2020. Norman I. Platnick. [https://en.wikipedia.org/wiki/Norman\\_I.\\_Platnick](https://en.wikipedia.org/wiki/Norman_I._Platnick). Accessed May 2020.
- Williams, D. and G. Edgecombe. 2020. Norman Platnick (1951–2020). *Systematics Association*. <https://systass.org/texts/norman-platnick/>
- Williamson Daily News (Williamson, WV) 15 July 1964, p. 1.
- World Spider Catalog. 2020. *World Spider Catalog, Version 21.0*. Naturhistorisches Museum Bern, Switzerland. <http://wsc.nmbe.ch>. doi:10.24436/2 Accessed October 2020.