

REMEMBRANCE: CARTER ROWELL GILBERT (1930–2022)

Stephen J. Walsh

Gainesville, Florida

Earlier this year the North American ichthyology community lost one of our most distinguished colleagues. Dr. Carter Rowell Gilbert (Figure 1) peacefully passed away on January 6, 2022 at age 91 with his beloved wife, Nancy, at his side. In a fortuitous way I became acquainted with Carter through correspondence a few years before I met him in person.

An excellent biography of Carter appeared in the “Historical Perspective” series published in the journal *Copeia* (now *Ichthyology & Herpetology*), based on an in-depth interview with him by David G. Smith and Inci A. Bowman of the Smithsonian Institution during the 2003 Joint Meeting of the American Society of Ichthyologists and Herpetologists (ASIH) in Manaus, Brazil. Therefore, I will provide a brief synopsis of his professional life with a few memorable anecdotes. Interested readers should consult the *Copeia* biography for a more detailed accounting of Carter’s personal life and his numerous professional achievements (Smith 2004).

Carter was born in 1930 in Huntington, West Virginia, into a family strongly founded in natural sciences. He developed a love of nature early in life through hikes and exploration in the countryside with his father, a Harvard-educated botanist. In 1942, the family moved to Columbus, Ohio, where Carter completed his early education and then enrolled in the Ohio State University (OSU) in 1947, where he received his B.Sc. degree in 1951. He went on to receive a M.Sc. degree from OSU before entering the doctoral program at the University of Michigan, where he received his Ph.D. in 1960, studying the systematics of the minnow genus *Luxilus* (Gilbert 1964). Smith (2004) noted that Carter’s visionary

work of the species complex has stood the test of time except that what he called *Luxilus pilsbryi* Duskystripe Shiner is now considered to be two species, *L. pilsbryi* and *L. cardinalis* Cardinal Shiner. During his college years, Carter was influenced and mentored by many notable ichthyologists and fishery professionals (Figure 2), including Milton Trautman, Reeve M. Bailey (his dissertation advisor), Robert R. Miller, Karl F. Lagler, John E. Bardach, C. Lavett Smith, Thomas H. Langlois, and others (Figure 2). Trautman was especially inspirational to Carter. In 1956, Carter met Nancy Hawbaker on a blind date and two years later they were married. Theirs was a lasting marriage of 63 years. Carter is survived by Nancy, two brothers (Robert and William), two sons (John and Stephen) and their spouses, six grandchildren, and several, nieces, nephews, great nieces, and great nephews.

My first interaction with Carter was by old-fashioned “snail” mail, years before personal computers and e-mail existed. I was working on my Masters degree at Southern Illinois University at Carbondale where I was studying the ecology of the Banded Pygmy Sunfish *Elassoma zonatum* in western Kentucky. My advisor, Brooks M. Burr, was deeply involved with other students and colleagues in life-history studies of several species of madtoms *Noturus*, a group that especially piqued my interest and was substantially responsible for my decision to pursue ichthyology as a career. As most graduate students, I took many tangents from my thesis research, one of which was to collaborate with Brooks on a life-history study of the Stonecat *Noturus flavus* stimulated in part from our observations of nesting behavior of this species in the Meramec River, Missouri. While conducting the requisite background literature survey for this study, we discovered that Carter had done his Master’s research investigating the age and growth of Stonecat in Lake Erie, where the species was known to reach much larger sizes than stream-dwelling populations. As it has always been difficult to obtain unpublished literature, I wrote to Carter asking if he could please send a copy of his thesis. He graciously and apologetically responded that he did not have a copy of his thesis. I then requested an interlibrary loan of his thesis from OSU and after receiving it made some photocopies and mailed one to Carter, for which he was grateful to have a copy. His original M.Sc. thesis is now accessible online (Gilbert 1953) and was very informative to Brooks and me in publishing a comparative life-history of the Stonecat (Walsh and Burr 1985).

After finishing my Master’s degree, I decided to further pursue graduate studies to obtain a Ph.D., but I was undecided on a university or what I really wanted to study, but I had some ideas. Brooks suggested that I research different institutions and people, and that it was not necessarily critical to focus on a particular

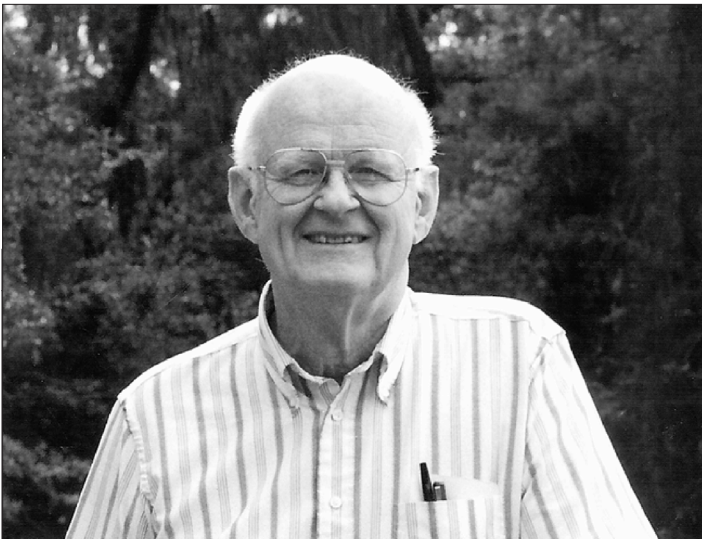


Figure 1. Carter R. Gilbert, ca. 2003. (Photo from Smith 2004)

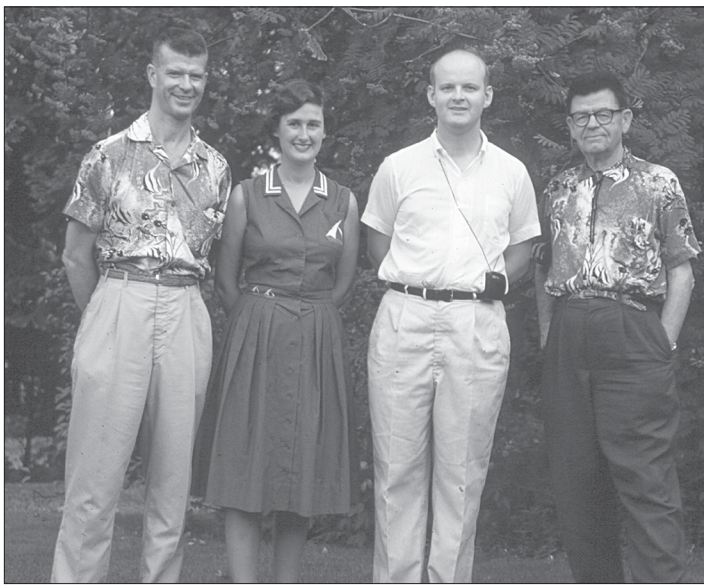


Figure 2. Carter Gilbert and his wife Nancy, with Robert R. Miller (far left), and Carl L. Hubbs (far right), in Ann Arbor, Michigan, 1962.

institution, but perhaps more important to find a good academic advisor. I carefully searched through Brooks' rolodex containing names of numerous ichthyologists around the country and selected a few of the ones who appealed to me based on their research interests as well as my own. After studying the basic graduate admissions policies of each university, I mailed letters to several professors. I was somewhat disappointed at a few of the negative responses from some of the potential advisors who indicated that they already had too many students, or were preparing to go on sabbatical. However, I was delighted when I received an enthusiastic response from Carter, thoughtfully and carefully typed on his archaic manual typewriter. He advised me that admissions to the Zoology Department (now Biology) at the University of Florida (UF) had stiff competition. I have no doubt that Carter's endorsement of my application had everything to do with me being admitted to the department in a year in which only six new graduate students were accepted. With great excitement I moved to Gainesville in 1983 to start my doctoral program with Carter as my advisor.

Carter had a remarkable photographic memory like that of the proverbial elephant. This became apparent to me soon after I arrived at UF. I was provided with a desk and small office space buried in the catacombs of the enormous fish collection at the Florida State Museum (now Florida Museum of Natural History). One morning I approached Carter in his office to request reprints of his publications, which of course he cordially provided. When he got to a copy of his annotated checklist of the fishes of Tortuguero, Costa Rica (Gilbert and Kelso 1971), he commented that in the printing process the page numbers of the headings in the table of contents were mistakenly omitted, so he quickly and subconsciously penned them in by hand. In those early days I witnessed other testament to his extraordinary ability to remember things. One of my favorite activities was to meet in the plaza between the museum and the biology building, where Carter would regularly gather for lunch with several other renowned luminaries, including Archie F. Carr, Jr. (herpetologist), John F. Eisenberg (mam-

malogist), W. Pierce Brodkorb (paleontologist and ornithologist), Lincoln P. Brower (ecologist), Henry "Hank" W. Setzer (mammalogist), and several others. One day Carter proudly announced that he could recite all 50 US states and each of their capitals in alphabetical order, and in rapid-fire succession proceeded to do so, immediately followed by reciting them in reverse alphabetical order! Among his colleagues and friends, Carter had a small group with whom he played a weekly mock baseball game, something that I gathered was akin to fantasy football. Having not personally observed playing of the game, I'm not familiar with the details. However, I do know that the game involved each player assembling a team based on real baseball players in history, together with their yearly statistics—batting average, RBI's, ERA, etc. Carter could easily remember the record for any given player, and thus had an advantage not only in assembling his fantasy team but also in each weekly game.

Further attesting to Carter's legendary memory, he could readily recite the pharyngeal tooth count of virtually any North American cyprinid, not to mention diagnostic combinations of scale or fin-ray counts. His knowledge of fish zoogeography of the eastern US was vast. Carter's meticulous attention to detail was evident in all of his published works. One of his most detailed contributions was a type catalog for several important North American freshwater fish families that he worked on later in his career (Gilbert 1998)—his familiarity with nomenclature, synonyms, authors, and dates was extensive. Unfortunately, this publication is difficult to obtain, and he recently had expressed interest in possibly updating it. Few if any people that I know would be as capable as Carter of doing that. Earlier in his career, Carter contributed extensively to the *North American Fish Atlas* including writing many of the individual species' accounts (Lee et al. 1980). Among my friends grounded in ecology more than in systematics, it became somewhat of a droll quip that many of Carter's accounts stated a species is "common in preferred habitat."

Carter was not only fervent about his fantasy baseball game, but he was a huge sports fan in general, especially collegiate play involving the UF Gators (the "Rowdy Reptiles"). He had season tickets and attended nearly every football, basketball, and baseball game on campus. The few times that I went to a game, it was relatively easy to spot Carter in the crowd from a distance because of his prominent glabrous cranium, for which he occasionally received lighthearted teasing from colleagues and that he humbly tolerated. A cartoon drawn by Noel Burkhead appeared in an issue of *Dopeia* with a map depicting Gainesville as the center for hair loss in the Southeast (additional notable ichthyologists with depilated domes had also relocated to the city).

Among my favorite memories of spending time with Carter in the field were on multi-day cruises with his students and colleagues aboard the relatively small Florida Institute of Oceanography vessel *R/V Bellows* during trips to the Dry Tortugas (Figure 3). We typically boarded the boat in Key West, which involved a long drive from Gainesville and a rowdy night of debauchery before departure in the morning (indulgences often continued on the boat, with some activities of questionable propriety not appropriate to divulge in detail here). Most of the students would have preferred to spend the entire time in the Dry Tortugas, but along the destination Carter always instructed the captain to steer the boat to shallow seagrass flats of the Marquesas Keys to drag a



Figure 3. Carter Gilbert (right) with Frederick H. Berry (left), 1964.



Figure 4. Carter Gilbert at ASIH social in Norman, Oklahoma, 1984.

bottom trawl. The fishes in those samples were always rather depauperate and unexciting, but a large portion of the bycatch was shrimp that were promptly steamed aboard by the ship's cook. It was quite evident that Carter's main motivation for the detoured side trip was for the pursuit and consumption of those delectable decapods. On the return trip it was always a great adventure to tow some midwater trawls in the Straits of Florida between the Keys and Cuba, for the samples always turned up unusual and interesting species.

Carter was well traveled throughout the world, both in his professional and personal life. He often went to Europe, especially France, where Nancy enjoyed practicing her fluency in French. Carter was equally comfortable conducting research on freshwater and marine fishes, where his studies carried him to most states east of the Mississippi River, and Canada, Mexico, Puerto Rico, Costa Rica, Colombia, Venezuela, and several islands in the Caribbean. Both Carter and Nancy regularly traveled to the annual meeting of the American Society of Ichthyologists (ASIH), an organization in which Carter provided extensive service including having been Secretary for many years and subsequently president-elect in 1992. The following year when he addressed the society as is customary in the ple-

nary session, Carter gave a stunning visual presentation of the subject of fishes on postal stamps. Philately was one of his passions; he had a huge stamp collection and was capable of divulging details of the history and attributes of any given stamp to anyone who might be interested. For over 40 consecutive years he displayed a distinctive assortment of some of his stamps at the annual FLMNH Collector's Day. Nancy typically accompanied Carter to ASIH meetings to socialize with some of their mutual good friends, especially Joe and Claudine Nelson from the University of Alberta. I traveled with Carter to many meetings of the Southeastern Fishes Council (SFC), of which he was a founding member. At SFC meetings he thoroughly enjoyed socially mixing with colleagues for the annual "presentation of the bird," a tradition whereby one of his good friends in ichthyology from the University of Alabama (Herbert T. Boschung, "Bo") or the University of Tennessee (David A. Etnier, "Ets") would ceremoniously contribute a large bottle of Wild Turkey 101 for the social. The presenter was from the school whose football team previously lost to the opposing team in the annual Southeastern Conference blockbuster matchup, which meant that Bo was most often the recipient of the bourbon. After sufficient lubrication of everyone present, Carter was usually successful in convincing Ets to perform his doltish imitation of a moron, which inevitably resulted in Carter guffawing with delight.

Carter was a decent, gentle, affable man and will always be remembered as such. In fact, he was honored by his colleagues with a light-hearted award in his name put forth one year during the banquet festivities at the annual ASIH meeting. In 1999, [NANFA member] Larry M. Page was the Master of the Ceremony. During the course of the evening, Larry paraphrased Oscar Wilde by saying that he "liked people better than principles, and liked people without principles best of all." In that vein he then announced that the ASIH was establishing a special award for an attendee at each annual meeting, dubbed the Carter Gilbert Bounds of Decency Award (CGBODA). The intent being to identify inappropriate or unbecoming behavior by any individual(s) during the meetings that served to call out persons who violated Carter's steadfast reputation of civility. I am sure there is more to the story than I know. Carter may have violated the tenets of the CGBODA himself many years earlier, where at the picnic during the 1984 ASIH meeting in Norman, Oklahoma, he spontaneously sprung forth and started gyrating among a group of Kiowa Indians who were performing a festive and likely sacred Native American dance (Figure 4). An amusing irony was that years later when the ASIH social was on the crowded dance floor of the House of Blues in New Orleans, I overheard Bo remark to Carter that "it ain't dancing if your feet ain't moving!"

Carter's colleagues honored him in another way that will exist in perpetuity, by naming six fish species as patronyms: *Opistognathus gilberti* Böhlke 1967, Yellow Jawfish from the Bahamas; *Etmopterus carteri* Springer & Burgess 1985, Cylindrical Lantern Shark from the Caribbean coast of Colombia; *Cirripectes gilberti* Williams 1988, Gilbert's Blenny from the Indian Ocean; *Sicydium gilberti* Watson 2000, a freshwater goby from the Dominican Republic and Puerto Rico, the validity of which is in question as a result of a recent genetic study (Engman et al. 2019); *Elassoma gilberti* Snelson, Krabbenhoft & Quattro 2009, Gulf Coast Pygmy Sunfish from Georgia and Florida (Figure 5), and; *Sphyrna gilberti*



Figure 5. Gulf Coast Pygmy Sunfish *Elassoma gilberti*, Suwannee drainage. (Photo by Isaac Szabo)

Quattro, Driggers, Grady, Ulrich & Roberts 2013, Carolina Hammerhead from coastal waters of South Carolina. Full citations for the species descriptions are available online in Eschmeyer's Catalog of Fishes (<https://www.calacademy.org/scientists/projects/eschmeyers-catalog-of-fishes>).

An obituary for Carter appeared in the Gainesville Sun (<https://www.gainesville.com/obituaries/pgai0131912>). A memorial service is planned for his family and friends at 1:00 pm Saturday, June 11th at the First Presbyterian Church in Gainesville, where he was a vociferous singer in the gospel choir.

Literature Cited

- Many of Carter Gilbert's contributions were published through the Florida Museum and are freely available online at: <https://www.floridamuseum.ufl.edu/bulletin/publications/>.
- Engman, A.C., G.M. Hogue, W.C. Starnes, M.E. Raley, and T.J. Kwak. 2019. Puerto Rico *Sicydium* goby diversity: species-specific insights on population structures and distributions. *Neotropical Biodiversity* 5(1):22–29.
- Gilbert, C.R. 1953. Age and growth of the yellow stone catfish, *Noturus flavus* (Rafinesque). Unpubl. M.Sc. thesis, The Ohio State University. https://etd.ohiolink.edu/apexprod/rws_etd/send_file/send?accession=osu1266067906&disposition=nline.
- Gilbert, C.R. 1964. The American cyprinid fishes of the subgenus *Luxilus* (genus *Notropis*). *Bulletin of the Florida State Museum, Biological Sciences Series* 8:95–194.
- Gilbert, C.R. 1998. Type catalogue of recent and fossil North American freshwater fishes: families Cyprinidae, Catostomidae, Ictaluridae, Centrarchidae and Elasmomatidae. Florida Museum of Natural History, Special Publication 1.
- Lee, D.S., C.R. Gilbert, C.H. Hocutt, R.E. Jenkins, D.E. McAllister, and J.R. Stauffer (editors). 1980. Atlas of North American freshwater fishes. North Carolina State Museum of Natural History, Raleigh.
- Smith, D.G. 2004. Carter Rowell Gilbert. *Historical Perspectives. Copeia* 2004(3): 697–703.
- Walsh, S.J., and B.M. Burr. 1985. Biology of the stonecat, *Noturus flavus* (Siluriformes: Ictaluridae), in central Illinois and Missouri streams, and comparisons with Great Lakes populations and congeners. *Ohio Journal of Science* 85(3):85–96. https://kb.osu.edu/bitstream/handle/1811/23068/V085N3_085.pdf

FishMap.org

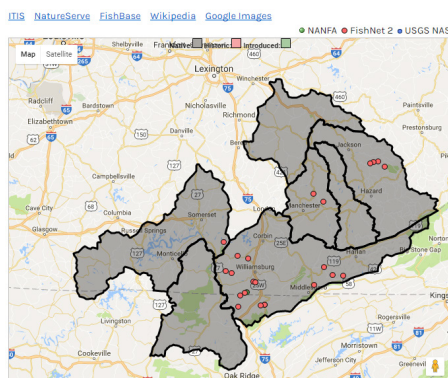


FishMap.org is for anglers, aquarium hobbyists, scientific researchers, or anyone else with a passion for fishes who wants to visually explore species' ranges or learn what species are in their local waters. The site is dedicated to spreading knowledge and respect for all fish species.

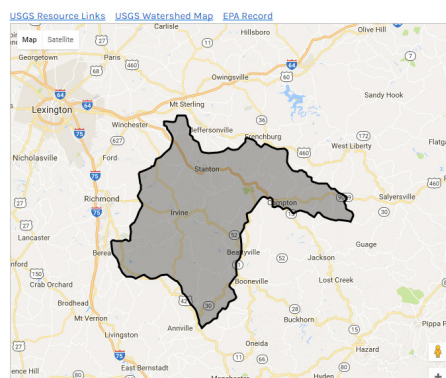
FishMap.org combines numerous data sources to provide a better view and more complete understanding of fish species distribution. It uses data from NatureServe, the National Atlas, the USGS water resources and Nonindigenous Aquatic Species programs, FishNet2, iNaturalist.org, GBIF, and iDigBio.

FishMap.org is sponsored by NANFA. Users can submit their own data to the portal to help map species distribution, so FishMap.org has been working with NANFA members to create an additional database of fish sightings and collections (currently nearly 30,000 records and growing).

Range and Collection Data



Explore Watersheds



Compare Ranges

