

**Austin Beatty Williams (17 October 1919–27 October 1999).
Biographical summary**

Rafael Lemaitre and Bruce B. Collette

(RL) Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560-0163, U.S.A.;

(BBC) Bruce B. Collette, National Marine Fisheries Service Systematics Laboratory, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560-0153, U.S.A.

Abstract.—The professional career and aspects of the life of Austin Beatty Williams (17 October 1919–27 October 1999), Systematic Zoologist for the Systematics Laboratory of the U.S. National Marine Fisheries, are summarized. Included is a bibliography with the 118 papers published by Williams, and a list of all the new names he proposed along with the holotype repository and catalogue number of species and subspecies.

Austin B. Williams (Fig. 1) was Systematic Zoologist at the Systematics Laboratory, National Marine Fisheries Service (NMFS), based at the National Museum of Natural History, Smithsonian Institution, Washington, D.C. After a valiant fight with cancer, Austin passed away at his home in Falls Church, Virginia. Shortly after his death, the Council of the *Biological Society of Washington* unanimously voted to dedicate this issue, the first of the new millennium, to his memory. This dedication is most fitting as Austin generously served the *Society* in many capacities during the last quarter of the 20th century, and gave luster to the *Proceedings* by using it to publish many of his important papers. He served the *Society* as a Editor of the *Proceedings* (1974–1977), Vice-president (1983–1986), President (1986–1988), Past-President (1989–1999), Custodian of Publications (1989–1995), and contributed significantly to its financial soundness as a member of the Finance Committee (1995–1999). He was editor of *Bulletin No. 3*: “Symposium on the Composition and Evolution of Crustaceans in the Cold and Temperate Waters of the World Oceans” (1979), based on the results of a U.S.-U.S.S.R. Cooperative Program. He also provided the summary chap-

ter for *Bulletin No. 6*: “The hydrothermal vents of the eastern Pacific: An overview” (Williams 1985b).

Austin had a distinguished career spanning five decades during which he published 118 papers (see bibliography). Born in Plattsburg, Missouri in 1919, he was the first child of Oliver Perry Williams and Lucy Sell; his siblings are brothers Hillis and Oliver. He married Jean McNicol with whom he had their only child, David (married to Anita Kyle, with two children, Lauren and Kyle). His family had only modest means so he had to work to support his education, first at McPherson College (A.B. 1943), and then at the University of Kansas (Ph.D. 1951), where he studied Ozark crayfishes. His studies on these crayfishes remain among the key references to identify these decapods in the region. From 1951 to 1955 he was with the University of North Carolina Institute of Fisheries Research, studying the life history and ecology of penaeid shrimps. He then worked at the University of Illinois from 1956 to 1963, after which he returned to the North Carolina Institute of Fisheries Research to continue his studies on marine and estuarine decapods. In the mid 1960s, Donald F. Squires, Chairman of the Department of In-



Fig. 1. Austin B. Williams. Clockwise from upper left: from church directory, 1995; with family and friends at Heart Tail Ranch, Butte County, South Dakota, one of his favorite fossil collecting sites, 31 July 1997, in back is son David, in front left to right are David's wife Anita with grandchildren Kyle and Lauren, and Norma Samuels (Norma Samuels); recording observations in his notebook on fossil Cretaceous decapods collected from the Pierre Shale at Heart Tail Ranch, Butte County, South Dakota, 6 August 1997 (Gale A. Bishop); at Mount Rushmore, South Dakota, August 1997 (Norma Samuels).

vertebrate Zoology and then Deputy Director of the National Museum of Natural History, Smithsonian Institution, considered him for a job; however, his interview with Secretary Dillon Ripley did not go well (most probably because of Austin's non-assuming personality), and he turned him

down. This was a loss for the Museum but fortunately he was hired by the NMFS' Systematics Laboratory in 1971.

In addition to his crustacean work, Austin served NMFS and the Museum in a number of different ways. For example, he represented the Allied Agencies (NMFS,

Agriculture, and what was then the Fish and Wildlife Service) on the Senate of Scientists in the Museum. During his tenure in this position, a question arose as to whether or not the administrative staff of the Museum had increased significantly in the several preceding years. Discussion went back and forth between the Senate and the Director of the Museum. Finally, Austin volunteered to get some real data on the issue. In a typical A. B. Williams way, he systematically went through the entire telephone directory and counted museum administrators at 5-year intervals, and demonstrated that the type of positions that the Senate considered as "administrative" had in fact increased significantly.

He was the acknowledged expert on and leader in studies of the systematics of eastern American decapod crustaceans. He is probably best known for his widely used monograph "Shrimps, lobsters, and crabs of the Atlantic coast of the eastern United States" published by the Smithsonian in 1984. His earlier study on the decapods of the Carolinas published in 1965, a precursor to his 1984 monograph, was selected as a Science Citation Classic in 1983, a rare honor for a systematist. His invaluable paper (Williams 1987a) on the identification of spiny lobsters by color patterns of the tails grew into a book co-authored with I. Dore, entitled "Lobsters of the world—an illustrated guide" (Williams & Dore 1988e); these two publications are indispensable for anybody interested in this group of economically significant decapods.

The primary focus of his research was the taxonomy, systematics, biogeography and evolution of various decapod groups, both fossil and Recent. He named 101 new decapod taxa (see list), including one superfamily, 2 families, 16 genera, 80 species, and 2 subspecies. Occasionally he also worked on other groups such as cirripeds, mysids, amphipods, and euphausiids, and even bird ecology. His publications provide us with a standard of excellence, and are well known for attention to detail, accuracy,

and usefulness in the identification of specimens while at the same time giving insight into phylogenetic relationships. No major group of decapods escaped Austin's attention. He published important works on crayfishes, penaeoids, carideans, thalassinideans, lobsters, anomurans, and brachyurans. His landmark studies on swimming crabs of the genus *Callinectes*, mud shrimps of the family Upogebiidae, commercial lobsters, xanthid crabs, and deep-sea hydrothermal vent decapods, among others, have earned him a place in the history of Zoology. His contributions to the systematics of hydrothermal vent decapods inspired other colleagues, and one genus and species of the crab family Bythograeidae Williams, 1980, was named after him (*Austinograea williamsi* Hessler & Martin, 1989, *Journal of Crustacean Biology* 9(4):645–661). In March of 1996 he traveled to Kumamoto, Japan, on a Japanese fellowship program to join Keiji Baba (Kumamoto University Faculty of Education) in the study of galatheids and other vent decapods from hydrothermally active sites in the western Pacific. Although his work concentrated on aspects of systematics and evolution, he also published key studies on the biology of commercial penaeid shrimps, ecology of meroplankton, larval genetics, and crustacean fisheries and mariculture. At the time of his death he had completed work but unfortunately left unpublished, an important revision of the crab family Latreilliidae.

Austin's impact on carcinology is not limited to that derived from his publications. Throughout his exemplary career he actively participated in many professional societies in addition to the *Biological Society of Washington*. He was president of the *Atlantic Estuarine Research Society* (1960–1961); co-founder, secretary (1971–1973), and president (1983–1985) of the *Estuarine Research Federation*; secretary (1985–1988) for the *Society of Systematic Biology*; associate editor for *The Crustacean Society* (1986–1991); and vice-president (1990–1991) and president (1991–

1992) of the *American Association for Zoological Nomenclature*. He was also a member of the *American Association for the Advancement of Science*, *American Fisheries Society*, *American Institute of Biological Sciences*, *American Institute of Fishery Research Biologists*, *American Society of Limnology and Oceanography*, *Society for Integrative and Comparative Biology* (formerly *American Society of Zoologists*), *Association of Systematic Collections*, *Ecological Society of America*, *Kansas Academy of Science*, and *Society for the Study of Evolution*. His editorial activities with various journals and symposia proceedings produced many significant contributions, and his involvement with doctoral and master-level students at various academic institutions led to the development of outstanding carcinologists who now must continue his legacy. His skills as reviewer were highly regarded by editors and grant program managers who were assured of a detailed, unbiased evaluation.

Several of Austin's papers won important awards or honorable mentions. His lobster identification paper (Williams 1987a), for example, won the highly regarded "National Marine Fisheries Service Outstanding Publication Award" for best paper in the 1997 Marine Fisheries Review. In recognition of Austin's life-time work, *The Crustacean Society* presented him in 1997 with their "Excellence in Research Award" during a ceremony at the National Museum of Natural History, Smithsonian Institution, Washington, D.C. [see Lemaitre, R., 1998, *Journal of Crustacean Biology* 18(3):619-620]. He was also honored with the "1999 Elton Sette Award" from the Marine Fisheries Section of the American Fisheries Society.

Austin will be remembered not only for his impressive scientific accomplishments but also for his human qualities. Unselfish almost to a fault, he made every effort to help colleagues and students alike. His height of 1.85 m (6'1") gave him a towering physique which combined with his deep

knowledge of decapods made him an imposing figure to both students and junior colleagues; however, his modesty was such that he made sure to treat everyone as a friend or colleague of similar stature. He accepted life-time honors bestowed upon him by his peers only hesitantly, and maintained until his end that he was undeserving of such attention. His personality, working habits, discipline, and inspirations date back to his early life experiences which he often mentioned to friends during casual conversations. One of his first jobs prior to entering college was at his family's farm in Sterling, Colorado, where he helped string fences, some of which had to be modified to "first class communications grade" by insulating the top strand of barbed wire to carry telephone signals. This worked fine until it rained and the circuits became grounded by water. During his Sterling days he also taught high school. One of Austin's scientific strengths was his observational and note taking abilities. He had been trained at Kansas to write reflective notes each night as if they were to be published. Those who have examined his field and office notebooks are struck by how remarkably clear and detailed they are.

Austin often mentioned the impact of the Great Plains of Kansas and Colorado on his psyche. One of his closest friends, Gale A. Bishop (Georgia Southern University), has said that he was impressed with Austin's collegiality when he first met him during a visit to the Smithsonian to study fossil decapods. Gale suggested that he might want to join him in the field in South Dakota to collect fossils. Austin did so with much enthusiasm, and the two worked together almost every summer from 1980 until the year of his death. Nancy Brannen Marsh (Science Department, Portal High School, Georgia) also joined them, and the three collaborated in studies of decapods of the Western Interior Cretaceous, collecting numerous fossil crabs, lobsters, and shrimps from the Carlile Shale and the Pierre Shale of South Dakota, Wyoming and Colorado.

These fossil collections have been donated to the Museum of Geology at the South Dakota School of Mines, Rapid City. He confessed to Gale that the timing of their collaboration was most appropriate as his wife Jean had passed away (1983) after a difficult illness (with Austin as major care giver), and his return to the Great Plains was just what he needed to gain closure and healing from the loss. This theme, Gale says, "came up many times and we concluded that getting back to our roots was an extremely healing process, both for Austin's loss and for the loss of both of my parents; it was an annual 'rehealing' as we came back into harmony with our roots and Mother Earth. When working with Austin on fossils in the Western Interior his intellect and collegiality were always apparent. His interests spanned the sciences, arts, education, and humanities. He often would visit the Rapid City Astronomy club to participate in telescopic observations, take us all out dancing at the Broken Boot Saloon in Rapid City, climb Bear Butte or Harney Peak, or head us up to Rushmore for the evening patriotic lighting program. While in the field, he brought new insights to paleontology, often seeing things we took for granted or forcing clearer explanation of our mutual deductions. Our collaboration was clearly very beneficial to Austin as well as to paleontologists Nancy Brennan Marsh, the late Reinhard Förster of Munich, and Georgia Southern students Mike Klug, Mehmet Samiratedu, and Amy Samiratedu. These insights were carried over into the laboratory and into collaborations on papers and research comparing Recent and fossil decapods."

The multi-faceted personality of Austin included a deep appreciation of the simple things of life, his family and friends. During the last decade or so of his life he was fortunate to share many moments with Norma Samuels, of Fairfax, Virginia, whose companionship undoubtedly enriched his life. Austin developed a passion for ballroom and international dancing, and a love for

choral music. He actively participated in several choral groups, including the Washington Cathedral Choral Society which performed in the National Cathedral, Washington, D.C. One of his performances is preserved on an audio CD-ROM entitled "Millennium; Russian Choral Music" (1990 Centaur Record Inc.). He worshipped, sang and was an active member of the New York Avenue Presbyterian Church, of Washington, D.C., where well-attended and emotional services were held for him on October 30, officiated by The Rev. Robert H. Craig.

Austin's remains are buried in Marion, Kansas, alongside those of his wife.

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List of taxa named by Austin B. Williams

Taxa are listed alphabetically within each major decapod group. Holotype deposition and number is indicated for all species and subspecies. Asterisk indicates fossil taxa. Abbreviations for repositories are as follows: AHF, Allan Hancock Foundation, University of Southern California (now Natural History Museum of Los Angeles County); AMNH, American Museum of Natural History, New York; MCZ, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; MZUSP, Museu de Zoologia, Universidade de São

Paulo, Brazil; SDSM, Museum of Geology, South Dakota School of Mines, Rapid City; SDSNH, San Diego Society of Natural History, California; UKMNH, University of Kansas Museum of Natural History, Lawrence; USNM, National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Decapoda

Caridea

- Alvinocaris* Williams & Chace, 1982b.
Alvinocaris lusca Williams & Chace, 1982b. USNM 184534.
Alvinocaris markensis Williams, 1988c. USNM 234286.
Alvinocaris muricola Williams, 1988c. USNM 234288.
Alvinocaris stactophila Williams, 1988c. USNM 234291.
Leptalpheus Williams, 1965b.
Leptalpheus forceps Williams, 1965b. USNM 111084.
Ogyrides hayi Williams, 1981a. USNM 47958.
Ogyrides limicola Williams, 1955a. USNM 96675.
Opaepele Williams & Dobbs, 1995c.
Opaepele loihi Williams & Dobbs, 1995c. USNM 251447.
Rimicaris Williams & Rona, 1986c.
Rimicaris chacei Williams & Rona, 1986c. USNM 228452.
Rimicaris exoculata Williams & Rona, 1986c. USNM 228443.

Astacidea

- Homarinus* Kornfield, Williams & Steneck, 1995b.
Orconectes eupunctus Williams, 1952a. UKMNH T4250.
Orconectes meeki brevis Williams, 1952a. UKMNH T8140.
Orconectes nana marcus Williams, 1952a. UKMNH T4970.
Orconectes nana Williams, 1952a. UKMNH T6640.

Orconectes neglectus chaenodactylus Williams, 1952a. UKMNH T4420.

Orconectes ozarkae Williams, 1952a. UKMNH T6150.

Thalassinidea

Aethogebia Williams, 1993b.

Aethogebia gorei Williams, 1993b. USNM 251425.

**Axiopsis eximia* Kensley & Williams, 1990c. USNM 219431.

Calocaris (Calastacus) jenneri Williams, 1974b. USNM 150472.

Calocaris (Calastacus) oxypleura Williams, 1974b. USNM 101651.

Pomatogebia Williams & Ngoc-Ho, 1990e.

Upogebia acanthops Williams, 1986a. USNM 213194.

Upogebia aestuari Williams, 1993b. USNM 251407.

Upogebia aquilina Williams, 1993b. USNM 251426.

Upogebia baldwini Williams, 1997d. USNM 251486.

Upogebia bermudensis Williams, 1993b. MCZ 12873.

Upogebia burkenroadi Williams, 1986a. SDSNH 3985.

Upogebia careospina Williams, 1993b. USNM 138899.

Upogebia casis Williams, 1993b. USNM 251224.

Upogebia cocosia Williams, 1986a. USNM 213268.

Upogebia coralliflora Williams & Scott, 1989b. USNM 230075.

Upogebia cortesi 2000a. USNM 291186.

Upogebia dawsoni Williams, 1986a. AHF2566.

Upogebia felderi Williams, 1993b. USNM 251430.

Upogebia galapagensis Williams, 1986a. USNM 213223.

Upogebia inomissa Williams, 1993b. USNM 251396.

Upogebia jonesi Williams, 1986a. USNM 213195.

Upogebia lepta Williams, 1986a. USNM 213270.

Upogebia macraryana Williams, 1986a. USNM 213202.

Upogebia macginitieorum Williams, 1986a. USNM 213219.

Upogebia molipollex Williams, 1993b. AMNH 6820.

Upogebia omissago Williams, 1993b. USNM 222057.

Upogebia onychion Williams, 1986a. AHF 4133.

Upogebia paraffinis Williams, 1993b. MZUSP 8049

Upogebia pillsbury Williams, 1993b. USNM 251435.

Upogebia ramphula Williams, 1986a. USNM 213446.

Upogebia schmitti Williams, 1986a. AHF 3933.

Upogebia spinistipula Williams & Heard, 1991a. USNM 239251.

Upogebia synagelas Williams, 1987d. USNM 233572.

Upogebia tenuipollex Williams, 1986a. USNM 213236.

Upogebia thistlei Williams, 1986a. USNM 213251.

Upogebia toralae Williams & Hernández-Aguilera, 1998b. USNM 285522.

Upogebia Vargasae Williams, 1997d. USNM 251484.

Upogebia veleronis Williams, 1986a. (USNM 213272)

Anomura

Munidopsis alvisca Williams, 1988c. USNM 234294.

Munidopsis glabra Pequegnat & Williams, 1995e. USNM 251455.

Munidopsis granosicorium Williams & Baba, 1990b. USNM 240205.

Munidopsis lentigo Williams & Van Dover, 1983b. USNM 191160.

Munidopsis lignaria Williams & Baba, 1990b. USNM 240202.

Munidopsis marianica Williams & Baba, 1990b. USNM 240198.

- Shinkaia* Baba & Williams, 1998a.
Shinkaia crosnieri Baba & Williams,
 1998a. USNM 251480.
Uroptychus edisonicus Baba & Williams,
 1998a. USNM 251479.

Brachyura

- Allactaea* Williams, 1974a.
Allactaea lithorostrata Williams, 1974a.
 USNM 143770.
Bothromaia Williams & Moffit, 1991b.
Bothromaia griffini Williams & Moffit,
 1991b. USNM 250884.
 Bythograeioidea Williams, 1980. (Super-
 family).
 Bythograeidae Williams, 1980. (Family).
Bythograea Williams, 1980.
Bythograea mesatlantica Williams, 1988c.
 USNM 234300.
Bythograea therydrion Williams, 1980.
 USNM 172830.
Callinectes similis Williams, 1966b. USNM
 113341.
Cyclozodion Williams & Child, 1989a.
Cyclozodion tuberculatum Williams & Child,
 1989a. USNM 234462.
Epilobocera wetherbeeii Rodríguez & Wil-
 liams, 1995a. USNM 268832.
Eplumula Williams, 1982a.
 **Heus* Bishop & Williams, 2000b.
 **Heus foersteri* Bishop & Williams, 2000b.
 SDSM 11016.
Hypsophrys noar Williams, 1974c. USNM
 150816.
Latreillia manningi Williams, 1982a.
 USNM 57071.
Latreillia metanasa Williams, 1982a.
 USNM 74570.
Menippe adina Williams & Felder, 1986e.
 USNM 228862.
 Mimilambridae Williams, 1979c. (Family).
Mimilambrus Williams, 1979c.
Mimilambrus wileyi Williams, 1979c.
 USNM 172222.
 **Necrocarcinus olsonorum* Bishop & Wil-
 liams, 1991c. SDSM 11000.
Ovalipes stephensoni Williams, 1976a.
 USNM 155110.
Panopeus austrobesus Williams, 1984a.
 USNM 59462.
Panopeus marginatus Williams & Boschi,
 1990d. USNM 239191.
Panopeus meridionalis Williams, 1984a.
 USNM 99846.
 **Plagiophthalmus bjorki* Bishop & Wil-
 liams, 2000b. SDSM 11021.
 **Raninella manningi* Bishop & Williams,
 2000b. SDSM 11018.
Rochinia decipiata Williams & Eldredge,
 1994. USNM 251434.
Stilbomastax Williams, Shaw & Hopkins,
 1977a.

Acknowledgments

We would like to thank David McN. Wil-
 liams for providing valuable family facts,
 and also several of Austin's colleagues and
 friends for contributing photographs and
 other information. In particular, we would
 like to mention Norma Samuels who kindly
 provided photographs and insight on as-
 pects of Austin private life; Gale A. Bishop,
 for providing valuable and often emotional
 testimony on his experiences in the field;
 Raymond B. Manning and Brian Kensley
 for reminiscing on their interactions with
 Austin; and Keiji Baba for information and
 photographs. The invaluable help of Mi-
 chael Vecchione and the dedicated staff of
 the Systematics Laboratory, National Ma-
 rine Fisheries Service, at the Smithsonian,
 in locating and compiling files and data on
 Austin's professional life, is gratefully ac-
 knowledged; these include Lara Cooper,
 Ruth Gibbons, David Hardy, Keiko Hira-
 tsuka Moore, Roosevelt McMillan, Mary
 Mickevich, Tom Munroe, and Martha Ni-
 zinski. Thanks also to Rose A. Gullidge for
 processing electronic images of the photo-
 graphs, and compiling bibliographic infor-
 mation; Chad Walter for proof-reading the
 bibliography; and Molly K. Ryan for put-
 ting together the figure.