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Robert Gordon Jaeger

Caitlin R. Gabor
Texas State University - San Marcos

Carl D. Anthony
John Carroll University, canthony@jcu.edu

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HISTORICAL PERSPECTIVES

Robert Gordon Jaeger

ROBERT (Bob) Jaeger was born on 16 December 1937 or, as he often fondly notes, "I was born on Beethoven's 167th birthday, in Baltimore, Maryland." Bob was born into the Great Depression, but his family's financial situation had stabilized by the time he arrived. He was told that during the years before he was born, when his parents already had four children, they moved every month to avoid paying rent at the end of the month. Bob's dad was a blue collar worker in a factory, and he expected Bob to follow him—a fate in which Bob had absolutely no interest. His mom was a waitress for many years. Bob's siblings were 13–22 years older, so he was almost an only child. But these siblings were influential in his career.

Bob's sisters, Doris and Mildred, did as expected in those days; they married early and raised children. Bob's two brothers were more influential in his development. James was the first person in Bob's family to go to college. He did so on the G.I. Bill after WWII. He went to UCLA and majored in journalism. James focused Bob's attention on all the reasons why it was beneficial to attend college. Bob's other brother, Charles, was an organic chemist, who learned chemistry as a technician, rather than as a student, at the University of Maryland. He eventually joined the faculty at Johns Hopkins, teaching organic chemistry labs. Charles's scientific background helped Bob to contextualize his budding love for animals. Bob's bedroom housed snakes (boas) and alligators along with rats, which were being raised to be fed to the snakes. Almost every room in the house had aquaria with fishes, and the basement had the local fauna from his wandering through the woods—box turtles, snakes, baby rabbits, and various insects. All were fascinating. By the age of 16, Bob had been influenced by the popular publications of two zoologists. Eugenie Clark's *Lady with a Spear*, about her work with sharks, and the books of William Bridges, documenting his scientific travels and work at the Bronx Zoo opened his eyes to the possibility that one could do research and travel to exciting places. . . and get paid for it! Older brother Charles also introduced Bob to his other passion, classical music. He started with Russian, French, German, and Italian composers from age eight. Around age 12, Charles introduced Bob to opera and took him to his first live performance in Baltimore and by the following year he was a fan of Wagner. By his teen years, Bob had settled on two aspects of his future: he would go to college to study science so he could get paid to do research and travel and he would maintain a lifelong love of classical music and opera.

Fig. 1. Bob Jaeger in Shenandoah National Park, Virginia, 1973. Photo by Christine Boake.

In 1956, Bob matriculated at the University of Maryland as a zoology major. Interestingly, Eugenie Clark later joined the faculty at the University of Maryland, when Bob was a Ph.D. student, and asked Bob to give a lecture in her course. Additionally, Bob met the assistant professor Richard Highton at the beginning of his junior year. Highton hired Bob as a research assistant, which is how Bob met his beloved Red-Backed Salamander, *Plethodon cinereus*. The rest of this portion of Bob's story can be read in Chapter 1 of Jaeger et al. (2016). However, Dick Highton was interested in taxonomy, which was not where Bob's proclivities lay. During this time, Bob became interested in the high population density

Fig. 2. Bob Jaeger at Mountain Lake Biological Station with his trusty Über salamander flag, Virginia, 1992. Photo by Sharon Wise.

of *P. cinereus*, its parapatric distribution with different species of salamanders, and the curious presence of only one salamander (or male–female pair) under each rock.

Bob subsequently enrolled into the University of California at Berkeley to get his master's degree. He took ecology courses from the ornithologist Frank Pitelka, but Bob was particularly fascinated by a course in Animal Behavior by Peter Marler. He also learned much about salamander ecology from his advisor, Robert Stebbins. Taking with him from Berkeley a good background in ecology and behavior, Bob returned to the University of Maryland to pursue his Ph.D. and to follow his interest in *P. cinereus*. Bob asked Richard Highton to be his advisor and put together a committee of newly hired biologists. This set the stage for Bob to study the behavioral interactions between *P. cinereus* and *P. shenandoah*.

As a doctoral student, Bob started by publishing a number of minor papers from side projects as a way to familiarize himself with the process. In 1969, Bob won the ASIH Stoye Award in Herpetology and earned his doctoral degree, which resulted in four major publications—one in *Evolution*, two in *Ecology,* and one in *Oecologia*. These papers, in combination, have been cited over 700 times as of late 2018. During this time, Bob was lucky enough to meet the Nobel Laureate, ethologist Konrad Lorenz who had been invited to give a departmental seminar. While Bob was writing his dissertation, Jack Hailman asked Bob to be a teaching assistant in his behavior course. One of the class projects was to study phototactic behavior of frogs—the results led to a research project on the subject which spawned the Jaeger and Hailman (1971) paper in *Nature*. This provided the preliminary data for an NSF grant proposal which ended up funding Bob's three-year postdoc. Bob stayed at the University of Maryland to oversee the teaching assistants for one year while waiting for the NSF grant to come through. At this point, Jack Hailman moved to the University of Wisconsin, Madison, and Bob followed.

During his postdoc, Bob studied phototactic behavior in anurans: some species are nocturnal but others are diurnal, so they examined how their foraging changed with intensity of white light and the spectral composition of light. Bob and Jack turned out a huge number of publications during that time, two of which were monographs. Bob was a very hard worker. He would eat breakfast, and then feed the large number of amphibians maintained in the laboratory. This was followed by a quick lunch in his huge lab/office and then he was off to conduct more research with a graduate or undergraduate student assigned to help collect data. Subsequently Bob would go home to eat dinner and write manuscripts. This schedule was usually followed seven days a week for three years. One month each summer, however, Bob returned to the Shenandoah National Park to continue his work with *P. cinereus* and *P. shenandoah* in the forest. Throughout the postdoc, Bob was married, but his marriage suffered because he put salamanders before his wife. What Bob learned from his time with Jack Hailman was to move

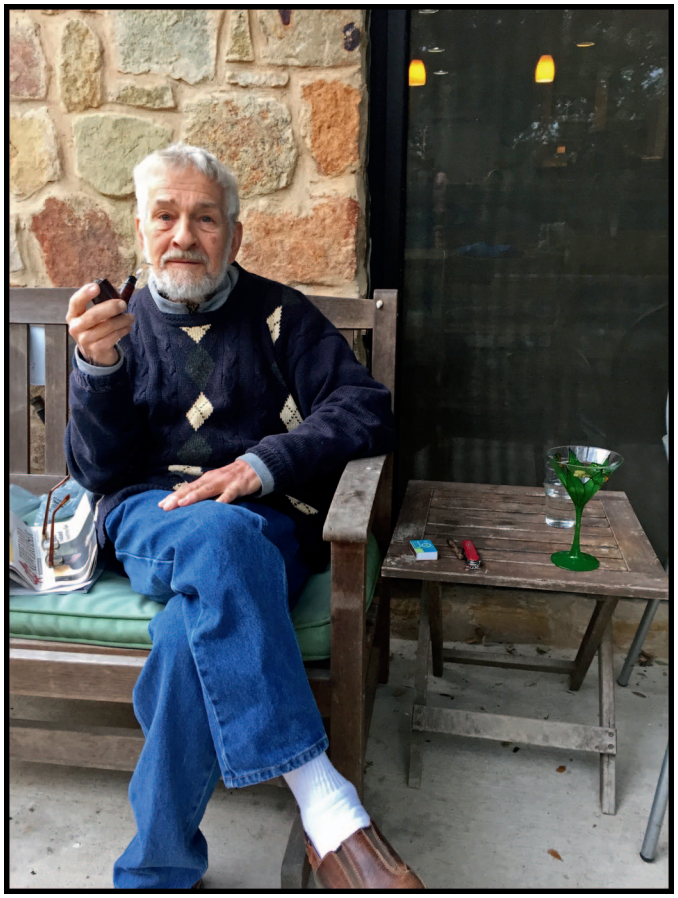

Fig. 3. Bob Jaeger enjoying a pipe and a martini, as always, Austin, Texas, 2018. Photo by Caitlin Gabor.

from thinking as an animal behaviorist to thinking as a behavioral ecologist with a solid evolutionary perspective.

After three years, Bob felt that he was ready to go on the job market. He had no problems getting interviews and joined the faculty at SUNY Albany where he focused on optimal foraging and plant climbing in his beloved *P. cinereus*. During this time, Bob realized it was necessary to do the boring but crucial basic research on *P. cinereus* to set the foundations for his research on territoriality, including foraging tactics within territories, pheromonal communication in advertising territories, and aggressive combat tactics in territorial defense. Because this work was foundational, Bob did not apply for grants and was not awarded tenure. Bob took this time to do fundamental research, and sacrificed tenure, but knew this work would set the stage for many more important questions to come. During this time, Bob graduated one doctoral and one master's student, and he got divorced. He has remained unmarried since then.

Bob was then offered a position at the University of Louisiana at Lafayette (ULL) in 1981. From this point on, Bob's foundational research set the stage for copious publications on foraging behavior, territoriality, and sociality in *P. cinereus*. This also led to his cognitive studies in *P. cinereus* showing how individual salamanders discriminate among small *numbers* of prey! Soon after Bob joined the faculty at the University of Louisiana, the Louisiana Board of Regents approved the doctoral program in his department. Bob served as the graduate coordinator and developed the guidelines for the program. Bob spent 12 years in this position, and during this time he wrote many successful grants for fellowships from the Board of Regents to support doctoral student research—which funded many of his students. Bob's seminal research, especially his work with aggression, territoriality, and dear enemy recognition, attracted a large number of master's and doctoral applicants. Some of these students joined Bob's work with *P. cinereus,* to shoot off in new research directions using his foundational research. Other chose new research directions involving other species including ambystomatids, opilionids, pronghorn antelope, fishes, skinks, and gastropods (Table 1).

Bob stayed at ULL for exactly 25 years to the day before retiring. Bob and his students had 145 publications by this time. While Bob was not always a coauthor, he contributed greatly to many of his students' sole-authored papers (over 50 in all). Most of the master's students went into conservation biology, and the doctoral students (23) all obtained faculty positions and tenure. This was partly due to Bob's insistence that his students take graduate courses in the philosophy of science, which made them attractive to liberal arts colleges and universities. At the time he retired, he had been recognized as Distinguished Research Professor, awarded an Endowed Professorship in Biology, and named as a Fellow of the Animal Behavior Society.

Shortly after Bob arrived at Lafayette, Margaret Stewart, an old friend from SUNY, Albany, phoned and talked Bob into becoming Editor of *Herpetologica* after Gary Packard stepped down. Bob wanted to make *Herpetologica* "the *American Naturalist* of herpetological journals." He didn't want to publish just good research, but the best of the research that was out there. Bob contacted herpetologists he thought were doing the best work in their fields and urged them to submit to *Herpetologica,* which attracted many papers that may not have been published there otherwise. Bob performed these duties for 20 years, to the day, and spread the work load by establishing associate editors for various fields. Bob would decide who handled particular papers based on the discipline, and an associate editor would solicit reviews from referees and make a recommendation to Bob. Bob read every paper that was published in this journal for 20 years, rejecting many and sometimes overruling the associate editors. Bob provided his own annotated comments on each paper and held the gates against bad grammar—no split infinitives! Bob often said, "Shakespeare did not write to be or to not be!" Bob's editorial work, as well as his own publications, were all prepared without the use of a computer. Instead he left the computers to others. For example, Caitlin Gabor typed into her computer all of Bob Jaeger's hand-written chapters for the Jaeger et al. (2016) book.

Bob recognized the importance of *watching* his animals to set the stage for future research questions. He emphasized the need to watch them for hundreds of hours to understand what is important for that organism, a lesson that he had learned from Konrad Lorenz. His love of behavioral ecology comes from his interest in the variation in and the evolutionary consequences of those different behavioral patterns at the level of the individual and not just the population level. Bob has been interested in how animals interact with their environment but not how humans disrupt their environment. Through all of Bob's career, he was and continues to be a cat person. Stray cats (and dogs sometimes)

Table 1. Robert Jaeger's graduate students by year of completion of degree. All at the University of Louisiana at Lafayette unless otherwise indicated.

Year	M.S.	Ph.D.	Year	M.S.	Ph.D.
1982	William Gergits (SUNY, Albany)	Daniel Formanowicz (SUNY, Albany)	1995	Heather Del Balso	Carl Anthony Jill Wicknick Sharon Wise
1984	Jo Goy		1996	Victor Townsend, Jr.	
1985	Susan Walls		1997	Sarah Faragher	Caitlin Gabor Michael Moore
1987	Eva Horne Vania Nunes Peter McDonald		1998	Jennifer Gillette Cynthia Lang	Jonathan Akin Cary Guffey
1988	Michael Carloss Bryant Buchanan		1999	Megan Gibbons	
1989	Janet Thomas	Alicia Mathis	2000	Maria Morais Michael Rubbo Scott Smyers	Jeremy Marshall
1991	Sharon Wise	Susan Walls	2001		Megan (Gibbons) Peterson
1992	Joe Palmer	Christopher Beachy Richard Simons	2003	Robert Page Jeffrey Hucko	Jennifer Gillette Charles Swart Donna Devlin
			2004	Nathaniel Ruby	Ethan Prosen Ryan Taylor
1993	Caitlin Gabor Martha Griffis	Bryant Buchanan	2006	Ben Dantzer Eric Liebgold Tami Ransom	
1994		Debra Lancaster	2008	Michelle Wilcox	Nancy Kohn

always find a home with Bob. Similarly, Bob found conferences boring and preferred to meet with young scientists in person. So Bob was frequently found sitting outside holding court with students or just watching all that passed by.

Bob always encouraged his students to work hard on their research and to publish, but he was also fond of socializing with them. Many graduates of the Jaeger Lab warmly recall parties at *Château Crapaud*, Bob's house in rural Louisiana. The house, a modest Cajun-built one-story, is situated on an acre of land complete with a frog pond (hence the name *Crapaud*). It was here that Bob held the Golden Spermatophore Awards, an annual party to highlight student work. Bob would pen elaborate awards that were then bestowed on students for the past year's achievements. *Château Crapaud* is also where Bob keeps, and listens to, his impressive collection of opera albums.

Since retirement, Bob has expanded his love of music with yearly trips to Europe for operas and ballets in addition to frequent trips to New York City and other cities with major opera houses. He also likes to visit with past students, including a yearly trip to spend Thanksgiving with Caitlin Gabor. Throughout these visits and his career, Bob never ceased to enjoy smoking a pipe and drinking good martinis. When Bob retired, he decided not to publish anymore and to focus on his second love, music (even though he doesn't play an instrument and his ballet skills are not very good). It was during Bob's retirement that Jane Brockmann invited him to publish a review of his research program with *P. cinereus* in the *Advances in the Study of Behavior*. Once Bob started writing, he realized this was an opportunity to revisit the main conclusions of his research program. Because his paper grew much too long for the journal, it became clear that Bob had to find an alternative outlet. Eventually it resulted in the aptly titled *Behavioral Ecology of the Eastern Red-backed Salamander: 50 Years of Research* (Jaeger et al., 2016). Bob is now a research associate at Utica College, New York.

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