

Joel W. Hedgpeth 29 September 1911-28 July 2006

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<sup>2</sup>Scripps Institution of Oceanography University of California San Diego La Jolla California 92093-0202 (wnewman@ucsd.edu) Joel Walker Hedgpeth, one of the truly commanding figures in marine arthropod studies and marine ecology, passed away on 28 July 2006 in Hillsboro, Oregon at the home of his daughter. He was among the more colorful figures in American marine science, a true polymath and romantic, the last of an age when scientists were well-read scholars. However, Joel was not easily characterized. While a scientist first and foremost, he was also a proactive environmentalist, as well as a linguist, poet, literary critic, essayist, philosopher, and historian. He was also a great traveler and, as a result, a fascinating raconteur.

Born 29 September 1911 in Oakland, California his mother, Nellie Tichenor McGraw, had been a Presbyterian missionary among the Hoopa Indians of northern California near Eureka. His father, also named Joel, was a blacksmith and descended from what Joel liked to characterize as "a long line of itinerant Methodist preachers." Despite such a Protestant background, Joel was anything but religious and was rather a skeptic on all aspects of the human condition. This critical bent and his love of reading probably had roots in his earliest education. Joel said that he felt his instruction began long before he ever went to elementary school; it was anchored in his grandfather's library as well as the family attic where back issues of all sorts of magazines were stored. Joel also attributed his interests in marine biology to a seashell collection of Henry Hemphill, a neighbor in Oakland and a noted Pacific coast conchologist of that time.

When formal schooling did begin, he never spent more than a year or two at any one school, and maybe this served to instill in him a restlessness for travel. However, it was also in this period that Joel related vivid memories of a stay in 1920-21 in the town of Mather, just east of Sacramento, California. From there, the family took an excursion to see the building of the Hetch Hetchy Dam. Joel recalled in later years that even at that early age he viewed the damming of the Hetch Hetchy valley in Yosemite National Park as an act of destruction. The strength of that memory was undoubtedly increased by another incident that happened near that time. While playing with a blasting cap, the device exploded in his hand. He lost some fingers and the blast permanently disfigured his face, accounting for the distinctive asymmetrical arrangement of Joel's features. The images of destruction he was seeing were seared in memory by what could have been a potentially lethal explosion. These connections might help explain Joel's fierce, lifelong opposition to environmental abuse and destruction.

Joel eventually went on to college, from 1931 to 1933 at the University of California, Berkeley, where he received his B.A. These were tough times in the country, and through the rest of the Depression he carried on his subsequent studies intermittently with the help of income generated from various short-term jobs, one of which was as a scientific illustrator for S. F. Light at Berkeley. Joel eventually completed his M.A. in 1939 under Prof. Light with a thesis on "Factors limiting the distribution of diaptomid copepods."

In the early 1940s, Joel continued with a variety of jobs and grants to support himself in California and Texas, and he published several papers at that time on the coastal fauna of Texas, the North American species of the caridean genus *Macrobrachium* (Hedgpeth, 1949), and articles and monographs on his first love, the pycnogonids (cf. Hedgpeth, 1947). He began work on a Ph.D. at the University of Texas in 1948, but in 1949 he was not advanced to candidacy because of what he termed "an internecine dispute." Undeterred, he returned to Berkeley and completed his doctorate in 1951 under Ralph Smith with a dissertation on "Ecological and distributional relationships of marine and brackish water invertebrates of the coasts of Texas and Louisiana."

It was sometime in the late 1930s through the agency of Waldo Schmitt at the National Museum that Joel first made the acquaintance of Edward Ricketts. Leaving the University of Chicago, Ricketts went west in 1923 to Pacific Grove, California to start a biological supplies business. When he arrived in Monterey Bay, little was published on the local coastal biota in terms of comprehensive surveys. Hence, Ricketts began to build a catalogue of the fauna, but immediately turned up things to which he could not put names. These specimens were sent off the National Museum to be identified, and many of his specimens proved to be species new to science. At this time, Waldo Schmitt urged Joel to make contact with Ricketts to assist him with some of these identifications, especially of the sea spiders in which Joel was specializing.

Ed Ricketts was another polymath, with interests in music, literature, philosophy, and history, as well as the more scholarly aspects of biological science. Ricketts came to be the center of an intellectual circle that included amongst others Jack Calvin (with whom Ricketts wrote *Between Pacific Tides*), Joseph Campbell, John and Carol Steinbeck, as well as Joel Hedgpeth. Steinbeck drew on the circle for many of the character of Doc in *Cannery Row*, and *Sweet Thursday*. Another character in *Sweet Thursday*, Old Jingleballicks (Old Jay), is said to be modeled in part on Joel Hedgpeth. Certainly, many, though not all, of the character Doc in these novels mirror Ed Ricketts.

Joel related that Ricketts loved to have company when he went out collecting. Ricketts had a very holistic approach to his study of shoreline animals picked up from his days as a student at the University of Chicago. Ricketts played the role of mentor and affected Joel, serving as a yet another source for Hedgpeth's own synthetic overview of the environment in general and marine ecology in particular. Certainly, Joel felt a tremendous affection for and debt of gratitude to that friendship with Ricketts, and this was expressed in overviews of those events published years later (Hedgpeth, 1971, 1978) as well as many stories he told over the years about Ed Ricketts and John Steinbeck. Furthermore, Joel served as editor of subsequent editions of *Between Pacific Tides* up to the 5th.

From 1950 to 1957, Joel was Assistant Research Biologist with Scripps Institution of Oceanography. He reached the peak of his pycnogonid research at this time (Hedgpeth, 1954). It was also during this period that he became involved with a committee of the Division of Earth Sciences of the National Research Council of the National Academy of Sciences, which culminated in the publication of the *Treatise on Marine Ecology and Paleoecology* (Hedgpeth, 1957). This volume on ecology and its com-

panion tome on paleoecology edited by Harry S. Ladd were incredibly stimulating for the emerging sciences in the post war period of marine geology and ecology, as well as paleobiology. The title "editor" never adequately described Joel's tasks. There were not only six chapters in the treatise volume written by him, but he was known for undertaking extensive editing and rewrites on the manuscripts of the other authors. He seldom took credit for this. This mode of work also applied to his editions of *Between Pacific Tides*, and his "editing" of *The Outer Shores*.

Joel's work habits at Scripps were described as very idiosyncratic. He would appear at 5:00 AM and proceed to work hard at his editing and writing for 5 to 6 hours before anyone else arrived at work. He would then spend the rest of the day making the rounds of offices and labs of all his friends and favorite students. Getting a visit (or phone call) from Joel Hedgpeth was always an experience. Conversations always seemed to begin in the middle somewhere, as if the exchange had been going on for quite sometime. Of course, the targeted colleague was never present at the beginning and would have to scramble to catch up with the subject. Joel always seemed to assume that everyone knew everybody else. However, the exchanges were seldom pointless, and if one hung in long enough the object of what Joel was getting at would eventually become clear. Nevertheless, along the way there might be long excursions through the arcane tidbits on old naturalists, gossip concerning the private lives of colleagues, and obscure references to scientific or philosophic points from the literature. It was always an education having a conversation with Joel Hedgpeth.

Joel delighted in deflating egos and the pretensions of "the powers that be." It was about this time that he adopted his nom de plume, Jerome Tichenor. He often penned memos to administrative types at Scripps, or letters to the editor of the local newspaper as Jerome Tichenor, President (and sole member) of the Society for the Prevention of Progress. Many a grad student and junior colleague wanted to join this august club, but Joel refused applications growth in members would represent progress. Nevertheless, his years at Scripps were productive for him, and he was not adverse to the idea of spending the rest of his career there.

Roger Revelle, who was director at the time, is reported to have been agreeable to securing a permanent slot for Joel. Joel produced a detailed plan for what he intended his position to be. This would include: 1) establishing a course in marine invertebrate zoology with practical field structured so as to build a database of long term observations through successive editions of the course, 2) expanding the scope of the institute's museum and scientific collections so as to serve as a stimulus to west coast and marine invertebrate taxonomy, and 3) establishing a chair in the history of oceanography. All seemed to be on track, and about this time Joel received an offer to go to the University of the Pacific. When Joel informed Revelle that he was thinking of leaving, Revelle expressed surprise. The director had set up a sizeable budget for Joel, and he was astonish that no one had informed Joel of this. Hedgpeth then discovered that one of the old guard researchers had already spent \$5000 of Joel's budget, and it became clear to him that he was to only

have a position within someone else's work group and was not to be independent. The choice to stay or leave Scripps at that point was an easy one to make.

During Hedgpeth's years in La Jolla, he spent summers in Dillon Beach at the mouth of Tomales Bay, north of San Francisco, California. The Pacific Marine Station (PMS) was a facility of the University of the Pacific. Its distance from the main campus in Stockton insured a degree of isolation and independence. Hedgpeth became increasingly involved in the station, and in 1957, he accepted a professorship in zoology at the University of the Pacific and became director of the laboratory.

PMS was a small facility. In Hedgpeth's time, the structures consisted of a laboratory/classroom building and a dormitory/commons. The buildings themselves were constructed of rough wood, and the little campus was adjacent to the beach behind the sand dunes. Compared to other marine laboratories along the Pacific coast, PMS was the smallest. However, its location made it ideal for sampling all manner of coastal marine habitats, and its isolation insured that there were few distractions from work or study. Although living and working conditions were Spartan to say the least, the PMS had its charms. Where else could one fall asleep in an upper bunk in the dorm while being gently rocked by the little tremors emanating from the San Andreas Fault beneath? The effect of PMS on carcinology was out of all proportion to its size. Several prominent crustacean workers cut their teeth on the summer marine invertebrates course, or pursued an M.S. degree there. These include people like Bob Hessler, Rod Feldmann, Bill Fry, Robert Menzies, Fred Schram, and Les Watling; one summer, Bill Newman gave the arthropod lectures, and in 1966 Gary Brusca was one of the course coodinators.

It was in northern California that Joel became involved in several environmental struggles focused in the Bay Area. The powers that be in the state government and Pacific Gas and Electric, the energy company, had decided that the best spot for a new nuclear reactor for generation of electricity would be the relatively isolated spit at Bodega Head at the mouth of Bodega Harbor. Bodega and the contiguous Tomales Bay to the south constitute a physical trace of the great San Andreas Fault, the source of so many earthquakes in California-the great 1906 quake and fire that destroyed the city of San Francisco being infamous. The fault proceeds north under Tomales and Bodega Bays, and then out to sea across Bodega Head, virtually right under the site slated for the nuclear plant. The University of California became involved since they were planning a marine biological station at Bodega Head, with Joel's very good and late friend UC professor Cadet Hand as potentially the director, and they were anxious to see the project move forward since grant support from PG&E would be forthcoming to monitor the local environment for some years to come. Despite the obvious hazards, planning for the project was proceeding until Hedgpeth became involved. It was largely through his efforts that the resistance to the power plant stiffened, and eventually Pacific Gas and Electric, and state and federal authorities had to back down. The plant was never built.

To commemorate the struggle, Joel penned "The Ballad of Bodega Head. Words anonymous (or unacknowledged). Tune from a random number's table."

The Indians they lived on Bodega, Their middens are there by the sea – The Indians are gone, remembered by song, Will this happen to you and to me?

Out on a rock called Bodega, There's nothing but granite and sand; But do not make the mistake of Thinking this country ain't grand!

The Russians they came to Bodega The Eskimo and the Aleut too; They built a fort far up to the north, The seal and the otter they slew.

Now Gaffney owned part of Bodega, The Smiths owned part of it too – All of the rest, the very very best, Is lost both to me and to you.

Oh, this old lady named Gaffney, Who owned a great desolate strand, She fought U of C and the P G & E For trying to pre-empt her land.

So Guidotti and Prather are planning To skid us all into the sea, On a road they will build along the bay shore With the help of the P G & E.

Oh democracy indeed is upsetting To those whose schemes are delayed; They think it a joke to listen to folk Who ought to be tied and belayed.

On to the scene came old Salo, With drift poles and Rhodamine-B; When some went west, he said to hell with the rest, I work for the P G & E.

Then out of the south came Daetwyler, With charts of the seismicity; He said, our data's the best, so let's go to press And mess up the P G & E.

Out on the beach of Bodega Stands a professor named Hand; He's tearing his hair, the fauna ain't there, The isotopes splatter the land.

The mutants converge on Bodega, And lumber right out of the water; Both saprophytic and hermaphroditic – Would you want one to marry your daughter?

They could put the thing on an island, Alcatraz would certainly do; The rock may be old, but the water is cold, And centrally located too.

Now Rosie's the Queen of Bodega, With money piled up in great sacks; The Regents are now as poor as a sow, 'Cause they lost the shirt off their backs. Now that granite rock of Bodega Is cracked up in dozens of ways, So when there's a quake, the whole thing will shake, While everyone solemnly prays.

Personen came out to Bodega, With blizzards of publicity; The P G & E rolled into its hole And said: "This is no place for me!"

Now what will become of Bodega, That rock by the sounding sea? Deep down in the hole there morns a lost soul, Who moans for the P G & E.

Out on a rock called Bodega, There's nothing but granite and sand; But do not make the mistake of Thinking this country ain't grand!

Joel was a hero to the local inhabitants of Marin County.

We think that Joel's years at Dillon Beach were the time he was most happy. The distance from the central campus of the University of the Pacific at Stockton ensured a degree of non-interference that would not be present with a position resident on the home campus. Of course, Joel was definitely the proverbial big fish in a small pond, but that never seemed to be a problem for him. Joel was keenly aware that his distinctive approaches to science and human affairs were not ones that lent themselves to close scrutiny by a college administration.

About this same time, Joel became interested in Syncaris pacifica, a small caridean shrimp endemic to the streams in Marin, Napa, and Sonoma counties. Joel joined forces with Cadet Hand and Armand Kuris to get the shrimp placed on the list of endangered species so that efforts could be undertaken to protect habitat in the face of growing development in that part of California. Later, when drought ensued in the 1970s, the shrimp's remaining habitats started to dry up. The team decided to collect animals from the wild and maintain them in tanks at the Bodega Marine Laboratory until such time as the drought ended and Syncaris could be reintroduced to its native habitats. Nevertheless, it was due to Joel's efforts that S. pacifica still hangs on, although it remains highly endangered (Martin and Wicksten, 2004). He also undertook an unsuccessful effort to determine whether the sister species, S. pasadenae, might still exist in southern California or northern Baja California, Mexico (Hedgpeth, 1968), but that species apparently went extinct around 1933.

Joel left PMS in 1963 to take a professorship at Oregon State University with a position as Resident Director of the Marine Biological Laboratory at Newport. The prospect of a position at a bigger, more prestigious school was enticing, as was the possibility of having his own Ph.D. students. However, the Oregon years were ones of professional unhappiness. Newport seemed to promise the kind of isolation and independence he had at PMS, since the central campus of the university was situated in Corvallis. However, OSU was by its nature a much more bureaucratic and centralized institution that UP. The Newport lab was not independent but was rather viewed as a mere appendix to the School of Oceanography in Corvallis. The demands of internecine politics with the Corvallis faculty soon exasperated Joel. Even the promise of Ph.D. students did not pan out, since by the time he retired he only managed to have a couple of graduates. Indeed, his survival at OSU was only sustained by the efforts of his secretary/administrative assistant, Grace Boden. Grace was able to placate "the old man" and run interference with the central administration for the graduate students and junior staff at Newport. Grace was also one of the few people who could stand up to Joel's bluster and bluff, and when he once let loose with a string of unprintable explicatives directed at the oceanography administration, Grace let it be known that if Joel wanted to have her services there would be no more language like that in her presence. It is said that a prophet is never recognized in his own land, and it was certainly so at OSU. Joel found more demand for his talents and knowledge at other universities during this period than he did in Corvallis, e.g., serving on some graduate committees at the University of Chicago at the invitation of Ralph Gordon Johnson.

Joel's work on crustaceans is often overlooked in comparison to his early work on pyncogonids, but nevertheless Joel was an early supporter and charter member of The Crustacean Society. However, this dual interest lead to an incident in the early history of the society, which we think can now be told because all the principals involved are dead.

In the earliest years of our journal's existence, all sorts of papers were submitted. The editor at that time, Arthur Humes, came to the Organizing Council, which was running the society at the time, for a decision on whether or not to exclude from consideration any papers dealing with either the horseshoe crabs, or the pycnogonids. A paper had been submitted on the pycnogonids, and Humes had wanted to reject it out of hand. The OC discussed the matter and voted that no papers should be excluded. However, Humes and Ray Manning, TCS's founding president, brought the matter back a few months later to the then newly elected governing Board of TCS at a meeting on 16 October 1981. Joel, acting as an advocate, had appealed what he believed was an arbitrary decision to reject the paper, and he argued that while neither of the excluded groups were strictly speaking crustaceans, they nonetheless had been placed therein in the 1800s, were typically linked in the public mind with crustaceans, and were associated ecologically with crustaceans in their native habitats. Hedgpeth further pleaded that pycnogonids would never constitute a threatening wave of submitted manuscripts, and there would be little danger that pycnogonids could swamp traditional crustacean submissions. He asked whether or not the society was farsighted and broadminded enough to "welcome all" into the fold? Manning felt strongly there was little to do except to support our editor, and he closed his remarks with an observation that, after all Hedgpeth did not really study crustaceans. Some of us on the board (including FRS) argued that position was wrong, that indeed an occasional pyc paper was not going to swamp the journal, but when the vote was taken the pycnogonid supporters were outnumbered.

This rather offended Joel, for as he wrote FRS, "If you indeed discussed pyc people vis-a-vis shrimp people in the council debate, I hope they are happy to have offended both (in my single person). After all I am the only pycnogonidst who has a grant to study shrimp." Manning wrote Joel of the verdict and, shifting the blame to the Board decision, offered to refund Joel's charter membership dues. Joel's reply was classic Hedgpeth:

I have received your letter of October 18 advising me that the Crustacean Society has reneged on its initial decision to admit papers on the pycnogonida to the pages of the Journal of Crustacean Biology. Appropriately enough this epistle reached me on All Hallow's Eve. I do note that your board, despite its demonstration of porcine chauvinism, feels enough twinges of conscience to authorize you to refund my membership fee for 1981.

Since you not only act to ban me from your pages but also invite me to depart from your company, may I suggest the society amend its constitution to forbid all mention of the Pycnogonida in any context whatever from your pages. This means of course that you must forbid papers on epizoics of pycnogonida from your pages, including certain pedunculate barnacles unfortunate enough to associate themselves with pycnogonids ....

In suggesting that I have no incentive to retain my membership, your august governing board has forgotten that I also published papers on Crustacea, like most students of pycnogoinds have done since the days of Georg Ossian Sars, Henrik Krøyer and many others. In fact I have more requests recently for my papers on Palaemonidae and Atyidae than for those on pycnogonids, and may be, for all I know, the only student of Crustacea to be instrumental in establishing a crustacean on an endangered species list .... As for refunding my money, I no longer consider it mine for I am not one to cancel a gesture made in good faith. Why not shove it up the nearest available crustacean? Or at least use it for [someone] who cannot afford your page costs.

Joel thought that maybe a counter group might be formed: the "Association for Marine and Maritime Arthropods— Except Crustacea."

The matter did not rest there, however. Many years later in 1988, FRS nominated Joel for The Crustacean Society Award for Research Excellence. Up to that point, the award had gone mainly to taxonomists at the Smithsonian National Museum of Natural History and it was felt that the base of recognition needed to be broadened. The nomination went before the board, but Ray Manning was "unalterably and very strongly opposed" to the nomination. Although Manning felt that Hedgpeth's lack of membership was a factor, he also believed Hedgpeth's research output and impact were "insignificant." However, it was that 1981 letter that for Manning "excludes [Hedgpeth] from any possible consideration by the Society."

At the time, it seemed that perhaps in a few years the original decision could be quietly reversed once Arthur Humes retired as editor and Ray Manning left the presidency. However, Humes persisted in the job for 20 years and Manning was president for 5 years, and after the matter of the Research Excellence nomination it was clear that the issue of journal content was truly closed. However, we both like to think that qualified papers in all fields of dealing with marine arthropods might now find fair and open consideration for publication in JCB.

There is no doubt that Joel could be acerbic; he had a sharp tongue and an even sharper pen. However, he could be incredibly kind and thoughtful in his own way. Although



Fig. 2. Joel Hedgpeth playing his Irish harp, at his home in Newport, Oregon in 1971.

he seldom mentioned them to colleagues, Joel enjoyed his family: his wife Florence and their two children, Sarah and Warren and their families. He loved to help students, and if he could not do so directly, he often referred them on to a colleague or friend with an admonition to "see what you can do." Although he often invited himself to stay with friends when he was traveling, it was as much for a genuine desire for fellowship than for a free bed. For example, when he would visit the Schram's house, he never came empty handed and usually had at least a bottle of Scotch whiskey to offer. Once, he even arrived with two big shopping bags of kumquats. What does one do with kumquats?---why make kumquat marmalade to be sure, and very good it was too. Admittedly, his habits could drive hostesses to distraction; he was prone to falling soundly asleep in a chair in the middle of the evening. This could be especially vexing in his younger years when he smoked a pipe for he was not averse to lighting up uninvited, ash and embers flying every which way. The pipe would fall from his hand or mouth when he'd doze off in a living room, or even clatter onto the floor during a seminar.

Joel possessed real artistic skills. When entertaining him as a houseguest, one had to be willing to put up with impromptu songs in Welch or Russian delivered in a vibrant baritone. Joel was also incredibly talented on the Irish harp on which he accompanied himself while singing some Celtic ditties. The photo (Fig. 2) of him in concert was taken during a party he and his wife Florence held for students in Newport the summer of 1971. In addition, despite the childhood injuries to his hand, he was an accomplished artist, as was often attested by artwork in his papers (see, Schram and Hedgpeth, 1978: 160, fig. 10).

Joel could also be sentimental. The untimely deaths in 1976 of his long time friend, Ralph Gordon Johnson, of the University of Chicago, and in the early 1980s of his friend of Scripps days, John Isaacs, and of his student Bill Fry from a sudden fatal heart attack moved him deeply. Maybe it was because these people were people very much in tune with Joel's characters and foibles. They were people with whom he expected to grow old.

Joel never did the expected. When he retired in 1976 from Oregon State University, Bill Fry organized a celebratory symposium (Fry, 1978) on sea spiders in Joel's honor at the Linnean Society in London. These occasions are supposed to allow the celebrant to sit back and be lauded, but Hedgpeth ended up contributing not one, but two papers to his own Festschrift, one on fossil pycs, which he wrote alone (Hedgpeth, 1978), and one on locomotion in pycs, which he did with FRS (Schram and Hedgpeth, 1978).

With retirement, he and Florence moved back to California and took up residence in Santa Rosa while reestablishing his affiliation with PMS. Joel's extensive library was housed partly in his study at home and partly in an office at PMS where he would visit several times a week. He shifted to consulting work and carried on with his pithy reviews for the Quarterly Review of Biology. The latter served to further swell his library. When the University of the Pacific finally closed down PMS in the early 80s, Joel felt strongly about it. However, he took special pleasure that the plans of the university to sell the property for a resort were frustrated because the original deed of gift for the land specified it could not be used for anything other than scientific purposes.

Characters larger than life (Fig. 3) seem to engender outsize events and happenings. Joel loved a good drink consumed in social settings. The summer of 1978 in Dillon Beach saw Joel visiting the lab once or twice a week from his home in Santa Rosa. After attending to lab business, around lunch time he would drive to the home of Steve Obrebski and his wife located at the top of the hill in the village. There he would visit and sample some of Steve's homemade wines. Then he would drive down to the Schram's rented cottage and enjoy a dram or two of single malt scotch. Finally, he would stop off at the bottom of the hill at the home of an old friend and consume a vodka and orange juice with her and her aged mother. None of the three households realized they were part of a chain. This went on all summer until we received word that Joel had checked into the hospital for a long-scheduled coronary by-pass operation (the first of two he had in his long lifetime). The three of us then traded notes and realized what had been going on. No liquor was permitted at home (Florence did not believe in it), so he was getting in some social interaction while he could.

Despite his great fame and knowledge, Joel was not a great lecturer. After going to OSU, every summer he would visit PMS. This generally occurred during the



Fig. 3. Joel Hedgpeth as Triton, of whom it was said that his call was so fearsome it could strike terror in the hearts of giants. From the program cover of the 64th annual meeting of the Western Society of Naturalists, 27-30 December 1983; artist was W. Schuss, reprinted here with the permission of Dr. Peter V. Fankboner, Simon Fraser University.

summer marine invertebrates course and during the time when Ralph Gordon Johnson and his students and work crews were in residence. In 1966, Joel arrived and this signaled a time when the dormitory kitchen went into overdrive on the preparation of major food feasts every day. Joel also had a public lecture scheduled at the high school in Point Reves Station at the head of Tomales Bay. People came from miles around to see and listen to him. The house was packed. Joel stepped forward after the introduction and announced that he had carefully loaded his lecture slides into the holders, but that he had then spilled them and had not had time to reorganize them properly. "I trust you will bear with me." Sure enough, the slides were in a mess, some were in side ways, others upside down, and they were in no particular order. Joel simply waited to see what came up on the screen and then talked from that image. As a lecture, it was a jumbled mess; as a performance, it was a tour de force. He closed off to wild applause. However, it was not a one-off event. Years later, while FRS was on a sabbatical at the Newport lab, Joel was lecturing in a course on coastal marine ecology. The wife of FRS decided to attend the lectures. After the first meeting of the class the question came, "How was it?" "Hmm, it was unique." "How so?"

"Well, the slides were all jumbled and mixed up, and he simply spoke to whatever came up on the screen. He certainly is a fountain of information, but you really have to work to figure out what he is getting at."

Joel had an impish sense of humor. Once, at a national meeting of the zoology and crustacean societies that occurred in Seattle, he entered the lecture hall, not unobtrusively at the rear, but at the front, right adjacent to the stage, barging in, bathing the screen in full light, and rather unsettling the speaker in the midst of her presentation. Joel then spotted one of his friends and went to sit next to him. They appeared to settle in to hear the rest of the talk, but in a few minutes, there issued from Joel a gravely whisper that could be clearly heard throughout the hall, "Gad, is she still speaking?" Where upon he got up, exited the hall by the door through which he had entered, bathing the darkened room again in light.

One could go on with a whole book of anecdotes about Joel Hedgpeth. The man knew how to create memories. However, to those who knew him, who profited from his knowledge freely shared, his editorial skills, his ideas offered for discussion or for argument, and his zest for life, he was a treasure. There will truly never be another quite like him.

## **ACKNOWLEDGEMENTS**

The authors would like to extend a special thanks to the following for their help in assembling facts and images for this obituary: Drs. James Carlton, Joel Curry, Peter Fankboner, and John McGowan.

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