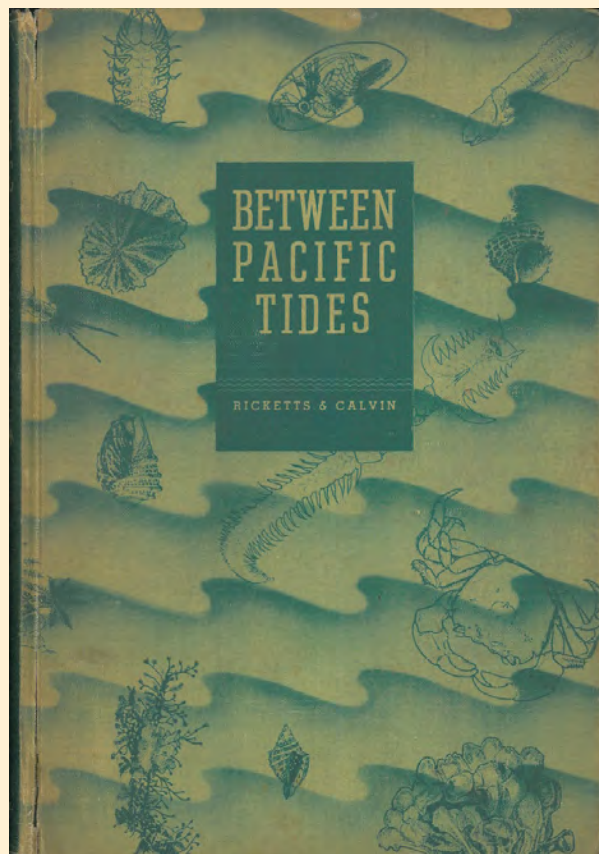


**EDWARD F. RICKETTS AND JACK CALVIN:  
THE PUBLISHING OF *BETWEEN PACIFIC TIDES*  
FIRST EDITION (1939)**



**THE LIFE AND LETTERS OF EDWARD F. RICKETTS INCLUDING  
PERSONAL AND PROFESSIONAL CORRESPONDENCE  
WITH FRIENDS AND ACQUAINTANCES**

Edited with an Introduction and Commentary

by Donald G. Kohrs

## EDITOR'S NOTES

Unless otherwise noted the letters in this volume were transcribed from electronic or print photocopies of the original correspondences provided by the following institutions. The Lund University Library, The Royal Library (National Library of Denmark and Copenhagen University Library), The Academy of Natural Sciences of Philadelphia. Ewell Sale Stewart Library. Archives and Manuscript Collection, Monterey Public Library, California History Room Archives, Smithsonian Institution Archives, Special Collections at Stanford University, Stanford University Press and the Ernst Mayr Library, Museum of Comparative Zoology Archives, Harvard University.

In transcribing these correspondences, irregularities and mistakes in the author's grammar, punctuation, formatting and spelling remain primarily uncorrected. Abbreviates for names, words, and places have remained as written in the original letter. The following list of abbreviations present some of EF Ricketts' most common word contractions that appear in this volume:

altho = although

arn't = aren't

acct = account

Jn = John Steinbeck

thoroly = thoroughly

tho = though

thru = through

## PREFACE

*Between Pacific Tides* by Edward F. Ricketts and Jack Calvin stands as an American classic in the literature of marine biology. First published in 1939, the book presents Ricketts' detailed observations gathered during ten years of his exploring and collecting marine specimens along the Pacific coast. Though the title fell out of print from 1942 to 1948, the book has sold more than a hundred thousand copies and remains one of the best-selling titles ever published by Stanford University Press.

Scholars have accounted the books' popularity due to the authors' revolutionary approach of organizing the intertidal life according to habitat, rather than the traditional organization by taxonomic manner. This ecological structuring of the book allowed the animals to be grouped according to where they are found – among rocky shores, sandy beaches, sand flats, mud flats, or wharf pilings. A second element that contributed to its success was the books approach to the intertidal life, beginning at the upper tide level and advancing seaward, just as a person exploring the shore would walk. Within this arrangement of invertebrates, the authors interspersed information about individual species' life history, physiology, community relations, as well as the influences of fluctuating tide level and wave shock.

A third element that accounted for the books' popularity was the non-technical writing style chosen by the authors, which presents the information in a manner useful to both the scientist and layperson alike. In addition to their use of a clear writing style, Ricketts and Calvin went a step further to reach the lay reader by presenting the dry scientific details as an engaging blend of facts, colored with snippets of wry humor.

Beyond engaging readers as to the curiosities of marine invertebrates common to the Pacific shores, the book itself, has stirred a bit of interest. For example, scholars have often wondered how Ricketts and Calvin gathered the scientific findings that were presented in their book. Clearly a survey of the coastal habitats surrounding the Monterey Bay could not have provided a sufficient understanding of the ecology of Pacific shoreline for the authoring of *Between Pacific Tides*. As well, a ten-week collecting trip from Tacoma Washington to Juneau Alaska, via thirty-three-foot boat named the *Grampus*, could not have served as an adequate scientific survey of the coastline for the authoring of *Between Pacific Tides*.

As for the proper identification of the invertebrates along the coast, minimal information has been written of the authors' communication with taxonomic experts and their contributions

to the science presented in the book. Also seldom mentioned are the hundreds of contemporary field studies cited in *Between Pacific Tides*. As such, the resulting work has left many to wonder how, as non academics, Ricketts and Calvin accessed and became scholars of a sizable amount of scientific literature.

Over the years, there has been much speculation surrounding the reason Stanford University Press first rejected the manuscript for publication. Some individuals have suggested that Ricketts ecological approach was too radical for the publisher. Others have blamed the critical reviews of the manuscript written from the Director of Stanford's Hopkins Marine Station, Professor Walter K. Fisher.

A chronological presentation of letters between EF Ricketts, Jack Calvin, Stanford University Press and a select number of invertebrate specialists provide answers to these speculations and other questions related to the publishing of *Between Pacific Tides*.

## ACKNOWLEDGEMENTS

I would first like to thank my wife Leticia Rascon Medina Kohrs, for allowing the history of marine science on the Monterey Peninsula to take up a significant portion of my life. Joseph Wible for supporting my literary and scientific interests, as they relate to the southern end of Monterey Bay; Stanford University Libraries, Department of Special Collections, Stanford University Press, Monterey Public Libraries California History Room and countless other archives for responding to requests for letters of correspondence. Thanks to the Ricketts family, including Ed Ricketts Jr., Lisa Ricketts and Nancy Ricketts for their many discussions, sharing of letters, and critical review of the manuscript. Thanks to John and Vicki Pearse for their endless encouragement and thought provoking questions. Thanks to Steve Webster and Jim Watanabe for their early review of the manuscript. And finally, a big thanks to Robert Dees and George Baer for their wealth of constructive criticism, editing suggestions, and endless words of encouragement.

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## EDWARD FLANDERS ROBB RICKETTS

Over the years, the life of Edward Flanders Robb Ricketts has received much attention. A bit of this attention has been the consequence of his having been the inspiration for the character “Doc” in John Steinbeck’s novels *Cannery Row* and *Sweet Thursday*. As a result, much effort has been directed toward understanding the influence Edward F. Ricketts had on his friend John Steinbeck. Less attention has been spent appreciating Ricketts’ career as a scientist and co-author of the book *Between Pacific Tides*.

On May 14, 1897, Edward Flanders Robb Ricketts was born to Charles Abbott Ricketts and Alice Beverly Flanders Ricketts in Chicago, Illinois. Besides one year the family spent living in Marshall North Dakota, Ricketts was raised in Chicago, graduating from the west side’s – John Marshall High School in 1914. EF Ricketts then enrolled in the Illinois State Normal University where he stayed for one year. In 1917, Ricketts was drafted into the U. S. Army Medical Corps, which resulted in a short tour of duty that extended from November 1918 to March 1919.<sup>1</sup>

In the summer of 1919, Ricketts enrolled in the University of Chicago. During spring of 1920, after six months of attending college full time and living with his family, Ricketts joined two roommates, James Nelson Gowanloch and Albert Edward Galigher in renting an apartment on Chicago’s south side.<sup>2</sup>

In the fall of 1921, Ricketts did not attend classes, but instead choose to experience a walking trek through the Southeast that traversed across Indiana, Kentucky, North Carolina and Georgia; a ramble similar to that of John Muir’s *A Thousand-Mile Walk to the Gulf*. This walk through the South was later remembered by Ricketts in the short article *Vagabonding Through Dixie*. Appearing in the June 1925 issue of the magazine *Travel*, this detailed recounting of his trek marked Ricketts’ first writing to be accepted for publication.<sup>3</sup>

Upon completing his trek through the South, Ricketts returned to the University of Chicago, where he continued to select classes in biology for his college education. In the fall of 1922, he enrolled in his final academic course of instruction, a senior level class titled animal ecology, taught by Professor Warder Clyde Allee.<sup>4</sup> Much has been written of Warder Clyde Allee and the influence his ecology course had upon Ricketts including the organizational structure of the book, *Between Pacific Tides*.<sup>5</sup>

Less attention has focused on other marine ecologists and zoological experts who were the friends, collaborators and acquaintances of Ricketts. Edward F. Ricketts has often been portrayed as an outsider to the academic world, having been excluded and distrusted by the scientific community, as he had not graduated with a degree from an academic institution. Numerous letters of correspondence from Ricketts to professional scientists, and their courteous replies suggest otherwise. In fact, these correspondences suggest Ricketts was well respected among both academic scientists and professional zoologists, who responded to, and supported his request for the identification of species and scientific literature pertaining to his research. The acknowledgment of Ricketts association with these marine scientists allows one to recognize their supporting his effort to gather the science presented in *Between Pacific Tides*.

The first among these associations to be recognized are Ricketts' college roommates, James Nelson Gowanloch and Albert Edward Galigher, the three of whom, for a short period, shared a south side Chicago apartment the men referred to as "The Boar's Nest."<sup>6</sup> It would be his association with these Chicago roommates that led Ricketts to move to California and become the proprietor of the Pacific Biological Laboratories; a business that lent it self well to gathering the scientific information presented in *Between Pacific Tides*.





Edward F. Ricketts.

Photograph courtesy of Ed Ricketts Jr.

## JAMES NELSON GOWANLOCH

James Nelson Gowanloch was born 1895 in Cypress River, Manitoba, Canada. In 1918, J. Nelson Gowanloch graduated with a Bachelors of Science degree from the University of Manitoba, Canada. The following year, Gowanloch received a scholarship for \$600, which allowed him to attend the University of Chicago and enter the graduate program to pursue his Ph. D.<sup>7</sup>

James N. Gowanloch's time at the University of Chicago was spent in the Department of Zoology, which then included renowned scientists such as Frank R. Lillie, Charles M. Child, Horatio H. Newman, Warder C. Allee, Carl R. Moore, and Libbie H. Hyman. In prior years, each of these scientists had spent summers at the Marine Biological Laboratory of Woods Hole, Massachusetts, as the Atlantic seashore provided access to the marine invertebrates used in their research. The years to come would see a number of these scientists from Chicago's Department of Zoology travel to Pacific Grove, California to access marine invertebrates common to the Pacific shores and conduct research at the Stanford University's Hopkins Marine Station.

Presented in the Annual Report of the President of Stanford University for 1920, one finds the following mention of University of Chicago Professor Frank R. Lillie, and his assistant J. Nelson Gowanlock, visiting from the seaside laboratory during the winter and spring quarter:

*From January 7 to March 10, [1920] Dr. Frank R. Lillie, Professor of Zoology, University of Chicago, and Director of the Marine Biological Laboratory, Woods Hole, worked on problems of fertilization using the two species of common sea urchins. Dr. Lillie was assisted by Mr. J. Nelson Gowanlock, University of Manitoba, and assistant in Zoology, University of Chicago.<sup>8</sup>*

It is now clear that of the three University of Chicago roommates who, for a short time, shared an apartment known as the "Boar's Nest", JN Gowanlock, was the first to visit Pacific Grove, California.

After receiving his Ph.D. from the University of Chicago, Gowanloch served as a member of the faculty at Wabash College, in Crawfordsville, Indiana (1922-1923) and Dalhousie University in Halifax, Nova Scotia, (1923-1930). He was then hired to the position of chief biologist of the Louisiana Department of Wildlife and Fisheries. A position he held for the next twenty-two years.<sup>9</sup>

In his position as chief biologist, JN Gowanloch's research addressed issues of water pollution, control of invasive water hyacinth and numerous other topics associated with marine biology. He authored an extensive list of scientific publication, including the popular bulletin *Fishes and Fishing in Louisiana*, first published in 1932.<sup>10</sup>

The following remembrance of the Gowanloch was presented in a memoriam published in the Louisiana Conservation Review:

*Dr. Gowanloch was noted as the "layman's scientist". It was his ability to break down the most rigid technical terms into "every day English" that made him popular with people desiring technical knowledge but handicapped by lack of technical education. His ability in the field of commercial fish drew to him many offers from foreign governments.*<sup>11</sup>



Photograph of Frank R. Lillie and James Nelson Gowanloch, taken in January 1920, during their three-month visit to Hopkins Marine Station. Photograph Courtesy of Harold A. Miller Library, Hopkins Marine Station, Stanford University Libraries.

## ALBERT EDWARD GALIGHER

Albert Edward Galigher was born in 1901 in Cairo, Illinois. In his teens, he moved with his mother, Mary Baker Galigher to Chicago, where he attended Hyde Park High School. Galigher next attended the Lewis Institute of Chicago where he graduated with a Bachelors of Science in 1919. He then attended the University of Chicago in pursuit of a Masters of Science degree. While he was pursuing his degree from the University of Chicago, as a graduate fellow in the Department of Zoology, Albert E. Galigher's collaborative research with Libbie Hyman resulted in the publication of two scientific papers; the first of which he co-authored with Hyman<sup>10</sup> and the second of which he was the sole author.<sup>13</sup>

On July 8, 1922, Albert E. Galigher married Doris June Kingsley and shortly thereafter set off on a sometimes dirt "Lincoln Highway" with his wife and mother bound for the central coast of California.<sup>14</sup> By the fall of 1922, the family had settled into the small coastal community of Pacific Grove. The following year, on April 21, 1923, Albert and Doris Galigher's son David was born.

The idea for AE Galigher to move to California and establish a biological supply company may have been a topic of discussion with his roommates, J. Nelson Gowanloch and EF Ricketts. As well, the idea to move to west may have been suggested during his collaborative research efforts with Libbie Hyman. Conversely, the reason for the Galigher's relocating to California may not have been to set up a biological supply company, but to seek employment at Hopkins Marine Station, as suggested by his daughter, Mary Galigher Groesbeck.<sup>15</sup>

The next person to move to Pacific Grove, California, in the fall of 1923, was AE Galigher's college friend Edward F. Ricketts. On August 19, 1922, a year before moving west, Ricketts married Anna "Nan" Barbara Maker; a wedding date just six weeks following the marriage of their friends, Albert and Doris Galigher. The young brides, Doris Galigher and Nan Ricketts, had long been close friends. In fact, it was Doris who had encouraged Nan to move from Pittsburg, Pennsylvania to Chicago, Illinois, and subsequently introduced Nan to her future husband, Ed Ricketts.<sup>16</sup>

Ricketts had delayed his relocating to California until after the birth of their first child, who was born August 23, 1923. Soon thereafter, he left Chicago, Illinois for the opportunity to join Galigher as a junior partner in the Pacific Biological Laboratories.<sup>17</sup> In November of 1923, sev-

eral months after he arrived in Pacific Grove, Ricketts was joined by his wife Nan, and their three-month-old son, Ed Ricketts Jr.

## PACIFIC BIOLOGICAL LABORATORIES

First located in a one-story board and batten building at the corner of Fountain Avenue and High Street in Pacific Grove, California, the Pacific Biological Laboratories supplied prepared microscope slides and biological specimens to both schools and academic research institutions. This collaborative partnership of AE Galigher and EF Ricketts lasted just a few years, officially ending in 1925. The transfer of Galigher's share of the biological supply business to Ricketts was remembered by Nan Ricketts in her memoir.

*After about two years there had to be a change at the Lab; there was a need for more financing. So Ed started writing to different biology houses and other sources to find some one to invest. University Apparatus in Berkeley responded. I believe that Ed and Albert both were in favor of the company. Then there came the split of partnership between Ed and Albert. Each had the opportunity to buy out the other, on certain conditions. It happened that Ed was the one who was able to raise the money, and Albert and Doris went to Berkeley.<sup>18</sup>*

In 1925, the Galigher family moved to Berkeley where Albert found employment, for a short time, as a technical assistant in the Department of Zoology at the University of California.<sup>19</sup> Finding he lacked the temperament for the University's departmental politics, Albert Galigher left the academic position in 1926 and established-in the back bedroom of a rented house in Berkeley - the AE Galigher Inc., Laboratory of Microtechnique.<sup>20</sup>

Three years later, in 1928, the building in Pacific Grove that housed the Pacific Biological Laboratories was sold. Fortunately, Ricketts found a desirable location along Monterey's Ocean View Avenue and promptly moved the biological supply business to the new site.





Pacific Biological Laboratories with Ed Ricketts father's Model A Ford parked outside.

Photograph by Fred Strong. Courtesy of Pat Hathaway Collection CV#-033-0011