Memorial to Kenneth William Barr 1914–1987

JOHN B. SAUNDERS Natural History Museum, Basel, Switzerland

Ken Barr was born on August 16, 1914, and died on May 20, 1987, following a series of heart attacks suffered during the previous few days. Up to the time that he was stricken, he had seemed in excellent health and vigor, so the shock to his family, friends, and professional colleagues was all the greater.

Ken's early life was spent in London and at Abingdon School in the Thames Valley; he went on to study geology at University College, London. He was awarded the Morris Prize and graduated with a First Class Honours Degree in 1936. Unlike many of his contemporaries who were absorbed into the British Geological Survey, Ken chose to go overseas. He obtained a position with Trinidad Leaseholds, Limited, a British company producing and refining oil in Trinidad, West Indies. During the ensuing years he rose from field geologist to senior exploration geologist and then to chief geologist in 1953.



In 1956, Trinidad Leaseholds Limited was bought by Texaco, and in 1964, Ken was transferred from Pointe-à-Pierre to their Latin American headquarters newly established in Port of Spain, Trinidad. For the next five years, Ken traveled widely in Central America, carrying out exploration studies for the company. He also spent a period in Venezuela acting as chief geologist in Caracas.

Ken began his work in Trinidad in 1936, carrying out a geological survey in the dense rainforest of the southeast part of the island. After that, he did exploratory work in many other parts of southern and central Trinidad. During his early days, he was much influenced by Hans G. Kugler, who was controlling the geological activities of TLL and of its parent organization, Central Mining and Investment Corporation, in both Venezuela and Trinidad. Between the two men there developed a close friendship that lasted for the rest of their lives. One of the last things that Ken did was to go to Basel in April for a gathering held in honor of Kugler, who died in December 1986 at the age of 93. At the time of their deaths, they were both working on a long-standing project on the Mesozoic geology of Trinidad which will be completed by their co-author.

It has already been said that Kugler's influence on the young geologists who worked with him was very great; the same can be said of Ken Barr. He never begrudged his time and his excellent advice, no matter how busy he was himself. I arrived as a new recruit in Trinidad one Friday in the autumn of 1951. The next day, Saturday, Ken offered to drive me around the producing field at Barrackpore. Like Hans Kugler, Ken was a first-class naturalist, and my bewilderment at all things tropical and new on that first introduction was, I think, compounded rather than lessened by my realization of the extent of his knowledge. I accompanied him in the field many more times, but that first occasion stands out vividly in my mind after all these years.

Many of our excursions into the forests of the Northern Range of Trinidad were memorable, and one occasion was more memorable than most. Ken was in front, cutting his way through dense undergrowth, when he called back quietly, "Oh, just a moment, there is a mapapire here." He was referring to "mapapire z'ananna" (*Lachesis mutus*) one of the large and extremely poisonous pit vipers that were common in the forest and cocoa estates in that area of Trinidad. When I peered over his shoulder, the two were regarding each other quite calmly, the snake coiled on a fallen tree, level with Ken's waist. Though we were both carrying sharp cutlasses to cut a way for ourselves, there was no question of killing the snake. However, we did persuade it to move away. It slithered quickly downhill into the ravine where our colleague, Colin Campbell, could be heard wading upstream (there was no confrontation between them).

Ken was an active member of the Trinidad Field Naturalists' Club and talked to them many times about his experiences in the bush. In addition, he was a keen and knowledgeable amateur archeologist who had conducted excavations in several kitchen middens in the south of Trinidad. In fact, it was at the invitation of a school teacher—Gwendolyn Lloyd—that he talked to her class; he took her out on his next dig, and they were married in 1943.

Ken's geological publications on Trinidad concern two main topics. The first relates to the origin of the crude oils found in the southern oil fields on which he worked with colleagues in geology and chemistry. The second area was the mapping of the low-grade metamorphic rocks of the Northern Range of Trinidad. His main paper on this topic was published in 1962–1963 by the Overseas Geological Survey of Great Britain. This piece of work still stands as a tribute to his skill as a field geologist and stratigrapher and, at the time, earned him a doctorate from the University of London.

In a wider sphere, his knowledge of Caribbean geology was great. He wrote a most useful paper on the tectonic framework of the Caribbean; it was first read at the First Caribbean Geological Conference held in Antigua in 1955 and later printed in full by the Tulsa Geological Society in 1963. This paper was written before the concept of plate tectonics had revolutionized world geology. In 1974, Ken wrote a further general paper, this time titled "The Caribbean and Plate Tectonics," in which the consequences of new findings were reviewed.

While working on Central American projects, Ken was often assisted by Texaco's resident geologist in that area, Gregorio Escalante. In a letter to me, Escalante gives an insight into their relationship:

I am one of the lucky people who worked for Ken. This wonderful experience was greatly augmented because I worked with Ken extensively in the field, under trying conditions, and I believe that it is in the field-deep in the bush-where you come to know people much better. I will never forget Ken's good humor ... always welcome after a long day of hard work, and I cannot help recounting a particular situation which has always been very much in my mind. We had at long last reached this Godforsaken town in northwestern Honduras where we were to spend the night after a long, hot day in the field. Quite tired and dirty, we discovered, to our consternation, that the only hostel in town had been taken over by a crowd of people who had come to enjoy some local festivity. We were thus given a small room, used for storage of perishables, adjoining the kitchen; there the concerned owner of the hostel had placed two cots. Quite perturbed by the appalling conditions, I decided to disinfect the room with a spray can of pesticide, concentrating my efforts in a suspicious, large crack in the adobe wall, which received a strong dose of the pesticide. It didn't take long. The powerful burst of pesticide brought bugs of every size, shape, and color out of that particular crack. With great apprehension I waited for Ken's reaction, which was not long in coming. His concern was not the horrendous sight, but rather the fact that I had disturbed the ecology! Ken very calmly proceeded to place a piece of cardboard to deviate the flood of bugs and to pick off all those bugs which had cascaded into his cot, examining them in the process. He then quite calmly lay down and very soon was sound asleep!

In 1969 the South American geological group of Texaco was reorganized, and its Port of Spain office was closed. With the approach of this change, Ken decided to return to England. Thus, at the age of 55, he started a new career in oil, this time with what was then called the British Gas Corporation, which dealt with onshore and offshore areas of Britain. He worked full time with them from 1969 to 1979. It is illuminating to quote from remarks made by Peter Hinde, assistant general manager (exploration) for British Gas:

Ken Barr was very much a father figure in our newly formed geological department and initially was the main reason why we became quickly respected within the oil industry. He was responsible in particular for training young geologists, and British Gas has always prided itself on the degree to which young graduates are trained. He was a very thorough and painstaking worker, and we could always rely on him for accuracy. So much did we value his services that when he reached official retirement age, we retained his services on a consultancy basis for a period of two years by mutual agreement, and indeed, I think this was the first time that we had ever done this. Ken Barr's position in the industry was typified by his invitation to become chairman of the Petroleum Exploration Society of Great Britain.

Ken assisted in the organization of the Second North Sea Exploration Conference, held in London in 1980, and was also one of the lecturers in the JAPEC course on the petroleum geology of the North Sea. He was elected a Fellow of the Geological Society of London in 1938 and of the Geological Society of America in 1959, and he was an active member of the American Association of Petroleum Geologists during his working life. While in Trinidad he had always supported the local branch of the Institute of Petroleum, and as a young geologist I often received a telephone call from Ken saying, "I have a seat in my car, so would you like to come down with us to Apex for the meeting tonight?" How could I refuse the chief geologist even if I had wished to do so?

Ken's professional life and his outside interests always took their place alongside his strong commitment to his wife Gwen and their daughter Catherine, who now lives in Canada with her family. However, their home played a role in more lives than just those of the family. It is interesting to look back on those days in Trinidad when the overseas staff lived in company houses grouped together in camps. This meant that we found ourselves in a close-knit society, and our association continued beyond working hours. The happiness of the members of a department depended to a considerable extent on the head of that department. Ken and Gwen took that commitment in their stride, and many younger staff members can look back with pleasure on the entertainment they provided; an excellent dinner, often followed by recorded classical music heard in congenial surroundings. The 8-mm movie was all the rage, and many evenings were spent on picture shows. Through movies, many a family relived its antics on the tropical beaches of the island. The temptation was to show a series of disjointed scenes with the casual comment that they had not yet been edited. Not Ken! His films showed the professionalism that characterized everything he did. One film struck me in particular; I remember it after 30 years. The word "Toco" and the date were written on the wet sand. A wave washed across the screen and the words melted away; a gentle panning to palm trees and blue sky, and we were off.... Ken himself was sometimes the entertainer; he took an active role in the amateur dramatics that flourished in the Trinidad Leaseholds environment.

Back in Britain, Ken maintained his interest in conservation and was active in his local branch of the National Trust. His training as a geologist enabled him to give some excellent talks on building stones. He was also a great believer in the Woodland Trust, an organization working to preserve British woodlands.

Add to all this his expertise with a pen in making geological illustrations and with a brush in water-color work, and you sum up a man of skill, gentleness, and patience whom we can only be thankful to have known and appreciated.

SELECTED BIBLIOGRAPHY OF K. W. BARR

- 1943 (and Morton, F., and Richards, A. R.) Application of chemical analysis of crude oils to problems of petroleum geology; Study of crude oils of forest sands of Bernstein Field, Trinidad, B.W.I.: American Assocation of Petroleum Geologists Bulletin, v. 27, p. 1595-1617.
- 1949 (and Morton, F., Richards, A. R., and Young, R. O.) The crude oils of Trinidad, Part III; Relationship of crude oils and stratigraphy in the Morne Diablo-Quinam Field: Journal of the Institute of Petroleum, v. 35, p. 675-704.

- 1951 (and Morton, F., Richards, A. R., and Young, R. O.) Relationships between crude oil composition and stratigraphy in the Forest Reserve Field of southwest Trinidad: Third World Petroleum Congress Proceedings, v. 1, p. 345-358.
- ____ The Jet Sampler—A method of obtaining submarine samples for geological purposes: Journal of the Institute of Petroleum, v. 37, p. 658-661.
- 1952 A note on a small ammonoid fauna from the Northern Range of Trinidad, B.W.I.: Geological Society of London Quarterly Journal, v. 107, p. 441.
- Limestone blocks in the Lower Cretaceous Cuche Formation of the Central Range, Trinidad, B.W.I.: Geological Magazine, v. 89, p. 417-425.
- 1953 The mud volcanoes of Trinidad: Caribbean Quarterly, v. 3, p. 80-85.
- 1958 (and Waite, S. T., and Wilson, C. C.) The mode of oil occurrence in the Miocene of southern Trinidad, B.W.I., *in* Habitat of oil: American Association of Petroleum Geologists symposium, p. 533-550.
- 1962-1963 The Geology of the Toco District, Trinidad, West Indies, Part 1; Overseas geology and mineral resources, v. 8, p. 379-415 (1962). Part 2; Overseas geology and mineral resources, v. 9, p. 1-29 (1963).
- 1963 The structural framework of the Caribbean region: Tulsa Geological Society Digest, v. 31, p. 75-102.
- 1966 A cross-section through the Northern Range of Trinidad: Third Caribbean Geological Conference Transactions, p. 27-33.
- 1968 (and Saunders, J. B.) An outline of the geology of Trinidad: Fourth Caribbean Geological Conference Transactions, p. 1–10.
- 1969 (and Escalante, G.) Contribución al esclarecimiento del problema de la edad del complejo de Nicoya, Costa Rica: Instituto Centroamericano de Investigación y Tecnologia Industrial (ICAITI) Publicaciones Geológicas, no. 2, p. 43-47.
- 1974 A walk in the forest—A recollection of a field day in Trinidad: Verhandlungen der Naturforschenden Gesellschaft in Basel, v. 84, p. 17-23.
- 1974 The Caribbean and plate tectonics—Some aspects of the problem: Verhandlungen der Naturforschenden Gesellschaft in Basel, v. 84, p. 45–67.
- 1975 (with Colter, V. S.) Recent developments in the geology of the Irish Sea and Cheshire Basins, *in* Petroleum and the continental shelf of Northwest Europe: London, Applied Science Publications for the Institute of Petroleum, v. 1, p. 61–73.
- 1981 (and Colter, V. S., and Young, R.) The geology of the Cardigan Bay–St. George's Channel Basin, in Petroleum geology of the Continental Shelf of Northwest Europe: London, Institute of Petroleum, p. 432–443.
- 1985 Graded bedding and associated phenomena in the Northern Range of Trinidad: Fourth Latin American Geological Congress Transactions, v. 1, p. 117–135.

4