

150 years of managing national geological assets: celebrating the sesquicentennial of the first Official Geological Survey in Jamaica: a reply

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I take this opportunity to congratulate S. K. Donovan on his recent publication “*Jamaican Rocks Stars*” (Donovan, 2010) that highlights notable personalities who have contributed to knowledge of Jamaican geology. I also commend his initiative in seeking to add to my paper and I am also grateful for the comments given.

However, while the comments of Donovan reflect his deep interest in this area of our national history, he overlooks the true objective of Bhalai (2010). It is quite fascinating to study historical characters, ponder their theories and deductions, and debate their practicality. However, one must be vigilant not to become overwhelmed with the voluminous detail – the “flesh” that Donovan seeks to give the paper instead appears to be more “fattening.”

To enlighten the readers including Donovan, I will present the focus of Bhalai (2010), as a basis from which to address many of Donovan’s concerns. Bhalai (2010) firstly, presented some of the work done by the officially commissioned geological surveyors (the word “Official” refers to those surveyors appointed by the Government for specific time periods); secondly, the paper mentions the work done during the period of those surveys in order to show some of the major tasks mandated; and importantly thirdly, shows those contributions that actually focused on national development.

In presenting the aims of the paper, it is also imperative to highlight what the article did not intend to undertake. The contributions of private survey parties in understanding the geology of a country are equally as important as those conducted by national surveys. Private contributions are vital, as these surveyors occasionally undertake research that a government commissioned survey will rarely embark upon. Additionally, private research funding has propelled and brought to fruition many geological investigations and developments that have profited nations worldwide. The work of independent surveyors was long recognized by the Imperial Government when Jamaica was a colony (Daily Gleaner, 1946), and today, as an independent state, private research still maintains its distinguished position. Bhalai (2010)

focused on the Government Surveys, but private and independent geological research works were mentioned where they have contributed towards national development.

Furthermore, in demonstrating how the achievements of the various periods of survey have contributed to national development, it was never the intention to undertake any debate of the validity of any theories or to attempt to resolve academic disputes. Academic discussions are not the focus of Bhalai (2010).

Donovan persists in highlighting that Bhalai (2010) does not give weight to the works of notable researchers. The works of Henry T. De La Beche and Robert T. Hill are presented in order to show how these stellar contributions have aided in installing the necessary foundations for the official geological surveys. De la Beche is remembered for his landmark survey of Jamaica, the first of its kind in this hemisphere, and his outstanding achievement of undertaking formal geological surveys in the United Kingdom. He is also remembered for establishing several organizations, most notably the Geological Survey of Great Britain now the British Geological Survey (Sharpe, 1856). The Jamaica Geological Survey (Part II of the West Indian Survey) is a daughter of the Imperial Survey. The parentage originated when the successor to De la Beche, Director-General Sir Roderick Murchison, provided advice and was instrumental in selecting the Surveyors for the first survey in 1859 (Stafford, 2002).

Donovan misleadingly suggested that Bhalai (2010) downplayed the work of R. T. Hill and “emphasized” the errors created. Donovan should realize that both the contributions and the errors of Hill were equally mentioned. The work of Hill is indeed significant, but like everything else, it has its place. Matley credits Hill’s memoir as being “invaluable and of great assistance” to him in undertaking his work during the survey he was commissioned to head in 1921 (Daily Gleaner, 1923). Now Matley had retired in 1920 after 36 years in the Civil Service, and not 1921 as Donovan stated (Garwood, 1948). Matley undertook mostly mapping surveys to supplement his assessment of the water

resources for which he was hired (some economic geological studies were also done) hence, it is obvious that he found Hill's work useful. Zans (1955) on the other hand noted that Hill's work was very useful in respect of physiographic descriptions but did not contribute much to understanding the economic geology, a study which would have been invaluable to the development of the mineral resources of the island. Zans highlighted the fact that, since the work of Sawkins, the mineral potential of the island had remained largely undeveloped. This independent survey of Hill, at that time, was not of benefit to the country in light of developing the mineral deposits; an industry the country would have warmly welcomed considering the "depressed state of the Colony's finances..."; a comment of Matley (*Daily Gleaner*, 1923).

Hill's criticisms of Sawkins (1869) are elaborated by Donovan. Donovan, like Hill, myopically viewed the situation prevailing at the time the first survey was commissioned. Hill, as indicated by Donovan, was supported by a fortune, and with his experience was an expert in his field. The First Official Jamaica Survey was supported by the Treasury of the Imperial Government. Now this Government commissioned a survey of the economic geology of the colony, not a stratigraphic assessment. This is not to say that the geological setting of the mineralized district should not be unravelled; it is far from that. However, the Government employed geologists who were qualified to undertake the job required. With the departure of the first director of the West Indian Survey conducted in Trinidad (Part I), G. P. Wall, the post of Director was open. Sawkins was more than qualified, though Chubb (1964), a main (and biased) source incorporated in

Donovan (2010), thought otherwise. However, it is clear that the Imperial Government, with their purse already stifled from the decline of sugar revenues from the colonies (Black, 1958), could not have afforded the services of Sawkins in the capacity of Director. Hence, the recommendation to hire a youth from academia, Lucas Barrett, was made.

Now this youth, from an early age, had a deep interest in resolving stratigraphy and was fascinated with fossils. This experience, supported by his academic career, poised him suitably as an expert in regional geological mapping. It is highly likely that it was this new Director Barrett who steered the survey towards the large-scale evaluation of the grain of the land rather than focusing on the mineral resources. This move was frowned upon by commercial interests who at the onset had moved Governor Barkly to "press" for a local survey for economic purposes. With the unfortunate death of Barrett the Survey continued, this time steered towards fulfilling the original mandate of outlining the economic geology.

The succession of geologists employed were mostly graduates of the (Royal) School of Mines, another institution in which De la Beche was instrumental in laying the foundation. A consultant palaeontologist from the Geological Survey of Great Britain was employed to assist in resolving the stratigraphic problems, but these geological issues were never priority. Additionally, with the rapidity of turnover of Survey geologists during that period (six geologists over 10 years), the final product would have ultimately suffered and unfortunately this was reflected in the stratigraphic interpretations. Hill, and now Donovan, should have realized this before attempting to bash the exemplary work of the first Survey.

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