Western Science

Department of Biology

Peter G. Knight, CD, JP
Chief Executive Officer/Government Town Planner
National Environment & Planning Agency (NEPA)
10 Caledonia Avenue
Kingston, Jamaica

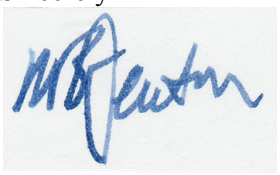
Dear Peter Knight:

I have had the opportunity to read over the ENVIRONMENTAL IMPACT ASSESSMENT FOR PROPOSED MINING OPERATIONS IN THE SPECIAL MINING LEASE 173 (SML 173) LOCATED IN THE PARISHES OF ST. ANN AND TRELAWNY, JAMAICA.

This leads me to offer some comments (attached) on the assessment with respect to bats. I hope that you will find my views useful and appropriate.

Thank you for providing this opportunity.

Sincerely



M.B. Fenton, Ph.D., FRSC
Emeritus Professor of Biology

c.c. Dr. Susan Koenig

Western University
Department of Biology • Biological & Geological Sciences Building • London, Ontario • CANADA • N6A 5B7
PH: 519-850-2542 • FAX: 519-661-3935 • www.uwo.ca/biology/

BATS AND BAUXITE
COMMENTS ON THE ENVIRONMENTAL IMPACT ASSESSMENT FOR PROPOSED MINING OPERATIONS IN THE SPECIAL MINING LEASE 173 (SML 173) LOCATED IN THE PARISHES OF ST. ANN AND TRELAWNY, JAMAICA.

By
M.B. Fenton, Ph.D., FRSC.
Emeritus Professor of Biology
University of Western Ontario
London, Ontario, Canada

As someone who has specialized in the study of bats since 1965, I have read over the parts of this report (Volume 1, draft final, dated 6 November 2020) relating to bats. My comments that follow reflect over 40 years of experience with bats, including studies of echolocation, bat identification, and, specifically, bats in Jamaica. My experience in Jamaica includes field work at St. Clair Cave, Green Grotto Cave, and Windsor Great Cave.

While I appreciate the efforts of Conrad Douglas and Associates Limited (on behalf of Noranda Jamaica Bauxite Partners II) to consider bats in this report, I have several concerns about the details in the report.

First the details of Jamaican bats provided in the report are cursory, missing important details about each species, from habitat to life history to echolocation behaviour. I found no indication of the extent of sampling on which the bat part of the report is based. The report also lacks the details about identifying bats by their echolocation calls. Most professionals who use this approach do not rely on one call identification system. It is customary to provide details of equipment and sampling as well as protocols for analyzing and reporting data. Statistical analyses are also very useful because they provide some objectivity for interpreting the data.

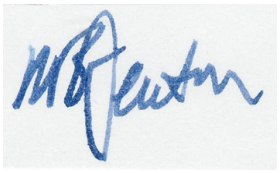
The report also fails to provide any information about the qualifications of the individual(s) who collected, compiled and analyzed the data about bats' echolocation calls. Basic questions about the importance of foraging habitats are not addressed and there is no information about populations of any of the species that might occur in the area that will be affected by the mining operations.

The report does make it clear that the mining operations will have dramatic and drastic impact on the habitats. But there are no details about the amelioration steps that might be taken to minimize the impact of the operations on bats (and other wildlife).

A statement about the potential role bats may play in spreading diseases to humans is presented without any important details. This statement is completely unjustified, leaving one to wonder why it was included in the report.

In summary, the draft final report that relates to bats is rudimentary and primitive. The utter absence of specific details makes it impossible to assess just how bats could be

affected by the endeavor. The rest of the report makes it obvious that the work will lay waste to the habitats of the area(s) of mining operations. There is no indication in the report that the natural systems of the area are of any concern to Noranda Jamaica Bauxite Partners II.



M.B. Fenton, Ph.D., FRSC
Emeritus Professor of Biology
University of Western Ontario.
London, Ontario, Canada.