Appendix B-3
Comment Submissions Received (Public, January 15, 2010)

The NIRB also received 73 comment submissions from the following members of the public:

- A. Hope Jahren
- Aaron D. Pan
- Adam Csank
- Alexander Kellner
- Alison M. Murray
- Amy McEwing
- Andrew Stanton
- Ashley Ballantyne
- Barry George
- Benjamin J. Burger
- Caitlin Horrall
- Caroline A.E. Strömberg
- Catherine Badgley
- Christopher Noto
- Claudia Schroder-Adams
- Dan Sharon
- David B. Scott
- David Dobry
- Donald Brinkman
- Eric Buffetaut
- Fabio M. Dalla Vecchia
- Florence Quesnel
- Gae A. Weber
- Gordon S Trick
- Grant Hurlburt
- Hans Larsson
- Jaelyn J. Eberle
- James F. Basinger
- Jan Lynett Gillette
- Janice L. Pappas
- Jean P. Lee
- Jeremy Martin
- Jerry Hooker
- Jessica Theodor
- Jing Chen
- Joanna Northover
- John C. Gosse
- John Storer
- Jonathan Perry
- Joseph S. Sullivan
- Kenneth D. Rose
- Lee Mishkin
- Leo J. Hickey
- Lucia Kuizon
- Margaret Madsen
- Marla de Boef Miara
- Mary R. Dawson
- Matt Lamanna
- Matt Vickaryous
- Matthew J. Kohn
- Michelle Pinsdorf
- Natalia Rybczynski
- Neil Kelley
- Paul A. Johnston
- Paul Sealey
- Philip Currie
- Pierre-Olivier Antoine
- René Barendregt
- Richard T. McCrea
- Robert F. Mason
- Robert Redhawk Hoffman
- Robin Smith
- Robyn J. Burnham
- Roger Summers
- Ronda J. Brook
- Sanja Hinic-Frlog
- Selena Y. Smith
- Stephen J. Godfrey
- Stephen L. Cumbaa
- Tony & Galina Rybczynski
- Vince Ward
- W. Travis Mitchell
- Wayne Sawtell

sent to info@nirb.ca, or via fax to (867) 983-2594

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

I wanted to write and urge you to take action to reconsider or restrict mining activities. The sites on Ellesmere Island targeted for mining are extremely important paleontological sites, and represent our best chance to learn what a planet without polar ice was like for animals, plants and life in general. Limiting access to these sites will be a severe detriment to one of the most important scientific questions of the day, and would decimate what is probably Canada's most important scientific contribution to Global Change science. Personally, I've done extensive work on Axel Heiberg Island, and have recently spearheaded a successful grant for > $1M to study Ellesmere Island (with Jaelyn Eberle, University of Colorado, Roger Summons, M.I.T., and Leo Sternberg, University of Miami). This funding was hard-won from the U.S. National Science Foundation and reflects the high significance of the Ellesmere sites, in terms of what scientists can learn from the fossils located there. As scientists, we pledge to treat the site as gently as possible, and to learn and thus add to its meaning – not plunder and destroy it as a mining company would.

In addition, the proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

A. Hope Jahren
Professor of Geobiology
jahren@hawaii.edu
http://www.jahrenconrad.org/JLABindex.html

cc: Professor Jaelyn Eberle, University of Colorado

100115-09EN067-A Pan Comments-IA2E

From: Aaron Pan [apan@fwmsh.org]
Sent: January 15, 2010 1:14 PM
To: info@nirb.ca
Subject: Concern about the Westar Coal Project's impact on important paleontological sites on Ellesmere Island

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar Coal Project. I am the Curator of Science at the Fort Worth Museum of Science and History and a paleontologist by training. Ellesmere Island is an amazing and very important paleontological site that includes impressive fossils that are 55 million years old. These fossils tell us about prehistoric Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a period of time when the Earth, especially the Arctic, was much warmer. Ultimately, evidence from Nunavut's fossils may be vital in helping us better estimate, understand, and prepare for future climate change. If the fossil sites in the Westar Coal Project areas are destroyed, then this vital evidence, data, and Nunavut hertitage are lost forever. Therefore, I recommend that the Nunavut Impact Review Board advise the Minister, pusuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6. I thank you very much for your consideration and request that you keep me informed of the results of this screening process. Thank you again.

Sincerely,
Aaron

Aaron D. Pan, Ph. D.
Curator of Science
Fort Worth Museum of Science and History
1600 Gendy Street
Fort Worth, Texas 76107-4062
817-255-9364
apan@fwmsh.org

100114-09EN067-A Csank Comments-IA2E

From: Adam Zoltan Csank [csank@email.arizona.edu]
Sent: January 14, 2010 11:44 AM
To: info@nirb.ca
Subject: Letter of concern

Laboratory of Tree-Ring Research

105A W Stadium

University of Arizona,

Tucson, AZ, USA, 85721

Tel: (520) 621-1608

Fax: (520) 621-8229

January 14, 2010

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

I am a Canadian PhD student studying at the Laboratory of Tree-Ring Research at the University of Arizona. My project focuses on the incredibly well preserved fossil forest sites in the Arctic with special focus on sites such as, Ellesmere, Bylot and Meighen Islands. These fossil forests are rich finds that have yielded much important information about past climate and ecology. In 2004 I had the chance to travel to Ellesmere Island and visit Strathcona Fiord and collect samples. My project requires knowledge of the original growth position of the fossil trees if it is to work at all and so my concern is that even if the samples themselves are preserved that all knowledge of where each individual piece comes from will be lost during mining and/or exploration activities.

In Addition, the proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

Adam Csank

PhD Candidate,

Department of Geosciences &

Laboratory of Tree-Ring Research,

University of Arizona,

Tucson, AZ, USA, 85721

100115-09EN067-A Kellner-IA1E

URGENTFrom: Alexander Kellner [kellner@mn.ufrj.br]
Sent: January 15, 2010 2:10 PM
To: info@nirb.ca
Subject: [SUSPECTED SPAM] URGENT

Importance: Low

Dear Sirs,
I was just informed about your intent to allow coal mining activity on Ellesmere Island (Nunavut). As you are probably aware, this region has some of the most important fossil deposits from the Arctic. This project can be quite devastating for those sites, causing irreparable loss of some or our natural treasures and impede the advancement of paleontological studies.
Therefore I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts. At least you should give more time for competent paleontologists to study the impact of such a project for those sites. I am convinced that there is no intention for the project to destroy such important natural treasures.

Yours Sincerely,

Alexander Kellner
Museu Nacional/UFRJ
Brazilian Academy of Sciences

100114-09EN067-A Murray Comments-IA2E

From: Alison Murray [ammurray@ualberta.ca]
Sent: January 14, 2010 9:30 AM
To: info@nirb.ca
Subject: proposed mining exploration on Ellesmere Island

January 14, 2010
To: Nunavut Impact Review Board (NIRB)
Re: proposed coal mining exploration project for Ellesmere Island (Nunavut)

_____

I am writing to request the the Nunavut Impact Review Board carefully considers the impacts on irreplaceable fossil resourses on Ellesmere Island.
As a palaeontologist, I can assure the NIRB that these resourses are of great scientific and educational valuable. I have personally co-authored a paper on material from a site in Strathcona Fiord that was published only last summer. Coal mining exploration in the area would likely irreparably damage the fossil localities.
I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6, or even better, that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.
Sincerely,

Alison M. Murray, Ph.D
Department of Biological Sciences
University of Alberta
Edmonton, AB T6G 2E9
Canada

(780) 492-9244
Alison.Murray@ualberta.ca

a copy of this letter is also being faxed to (867) 983-2594

100114-09EN067-A McEwing Comments-IA2E

From: DAVID MCEWING [dmcewing@rogers.com]
Sent: January 14, 2010 9:15 PM
To: info@nirb.ca
Subject: proposed coal mining operations in Nunavut

Dear members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project. I am a microbioloy technologist in Ottawa and I am greatly concerned for the biological diversity and history of Canada both of animals and plants living and extinct, no matter how large or small.

I would like, therefore, to object to the proposed coal licencing on historically sensitive land in the Ellesmere Island areas to Weststar. I realize that coal is an important commodity and natural resource, but at the same time, mining of coal in this area of Fosheim Peninsula and more specifically the Strathcona Fiord as well as other paleantologically significant sites may destroy a part of Nunavut's history that can never be replaced. Of course, many persons have not heard about this proposal and still others don't care about the history of your/our land, but I think it is a significant addition to Nunavut's, Canada's and the world's biological development.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut’s history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. Already, at least one new species of animal fossil has been discovered in the area and how many others might there be? Some of the fossils also provide evidence from a time when Earth, especially the Arctic, was warmer. Using this evidence from Nunavut’s fossil record may help us better estimate the effects of and prepare for future climate change which is now approaching.

In other areas of our country (most specifically Alberta), fossils and aboriginal finds are treated with more respect of their worth. I know that in Calgary, if aboriginal artifacts are found on your land, then you are not allowed to develop that section of your property. I also know that in Alberta, any fossils that are found by a private citizen are not to be taken from the province and are shown the importance and the respect which they deserve.

If the fossil sites in the Westar coal project areas are destroyed, the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

&nbs p;

Sincerely,

&nbs p;

100114-09EN067-A McEwing Comments-IA2E
Amy McEwing

&nbs p;
dmcewing@rogers.com

100114-09EN067-A Stanton Comments-IA2E

From: Andy Stanton [dinohead@gmail.com]
Sent: January 14, 2010 11:54 AM
To: info@nirb.ca
Subject: Proposed coal mining on Ellesmere Island

To the Nunavut Impact Review Board,

It has recently been called to my attention that a proposed coal mining operation on Ellesmere Island may adversely affect the unique fossil sites found there. I urge you to consider these irreplaceable resources when evaluating the proposed project. While I understand the economic importance of coal we should not loose sight of things whose value cannot be measured in dollars.

I urge you to require of full paleontological evaluation of the site.
If development of the site cannot be done without protecting the fossil and other resources, then the development should not go forward.

Thank you for your time,

Andrew Stanton
Department of Earth Sciences
Utah Valley University

University of Colorado at Boulder

Department of Geological Sciences

Boulder, Colorado 80309-0399
303-492-8141
Fax: 303-492-2606

Dear Nunavut Impact Review Board,

This is a letter to express concern over the recent rights granted to Weststar Resources to exploit coal resources on Ellesmere Island, Nunavut. The paleontological sites found on Ellesmere Island are a valuable repository of fossils that document the response Arctic ecosystems to warmer climates. Information gleaned from these fossils is of critical importance to the natural history and heritage of Nunavut, as well as I have been collaborating with Canadian scientists for several years at fossil sites on Ellesmere Island, especially the Beaver Site located at Strathcona Fiord. From this collaboration we have learned that the Arctic was 15 to 20° warmer than present (Ballantyne et al. 2010; Ballantyne et al. 2006), when atmospheric CO_2 levels were comparable to today. Our research suggests that the Arctic climate system is extremely sensitive to greenhouse gases and that future Arctic climate change may be severe (especially if we continue to depend on fossil fuels, such as coal, as our primary energy source.

I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal require review under Part 5 or 6, until a thorough paleontological assessment can be conducted on all known fossil sites on Ellesmere Island. Such an assessment will ensure that both the natural history and energy resources of Nunavut will be conserved well into the future.

Respectfully yours,

Ashley Ballantyne PhD
Research Scientist
University of Colorado
Boulder, CO 80309,
USA

Ballantyne, A. P., D. R. Greenwood, J. S. Sinninghe Damsté, A. Z. Csank, J. J. Eberle, and N. Rybczynski. 2010. Significantly higher Arctic surface temperatures during the Pliocene indicated by multiple independent proxies. Geology **In press**.

Ballantyne, A. P., N. Rybczynski, P. A. Baker, C. R. Harington, and D. White. 2006. Pliocene Arctic temperature constraints from the growth rings and isotopic composition of fossil larch. Palaeogeography, Palaeoclimatology, Palaeoecology **242:** 188-200.

100115-09EN067-B George Comments-IA2E

From: Barry F. George [barry@ncf.ca]
Sent: January 15, 2010 1:20 PM
To: info@nirb.ca
Subject: Westar coal projects in Nunavut

Attachments: coal licence.wpd

January 14, 2010

To members of the Nunavut Impact Review Board,

I would like to comment on the issuance of licences being given to Westar for exploration for coal in the islands of Nunavut.

For years I and others have been aware of unique paleontology sites which happen to coincide with some of the exploration sites. These places have been the source of important information on cenozoic flora and fauna, and have yielded data of importance to paleo-climate research. The latter is now important for the development and validation or invalidation of climate models, including natural feedback mechanisms. This could prove to be crucial for developing policies toward climate change.

Various researchers, including Dr.Richard (Dick) Harrington and Dr Natalia Rybczynski have made presentations of findings based on these significant sites to members of the Ottawa Paleontology Society over the last decade. Many people in Ottawa, as in other parts of the world, have become aware of their significance.

I urge you to attach conditions to licences, or by some other means ensure that fossil sites are sought, identified and protected. I am told that this can be done by the Nunavut Impact Review Board advising the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I suggest:
1. Funding by Westar of paleontologists chosen by the Museum of Nature to accompany prospectors; 2. Sites now identified be protected by those exploring areas under licence, and that paleontologists who have worked in the area be sought and consulted to identify these sites; and, 3. Work be adjusted when fossils are found elsewhere to protect those fossils and others which may be in the same area.

Thank you. I would appreciate a reply which details the steps you will take to protect our heritage of fossil sites.

Sincerely,

Barry George

100 Beachview Private
Ottawa ON K1V 1M7
barry@ncf.ca
cc: public letter

100114-09EN067-B Burger Comments-IA1E

From: Benjamin Burger [bburger@swca.com]
Sent: January 14, 2010 1:58 PM
To: info@nirb.ca
Cc: jaelyn.eberle@colorado.edu
Subject: Westar Coal Mining Proposal for Ellesmere Island (Nunavut)

Dear Members of the Nunavut Impact Review Board,

I urge the protection of these valuable sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.

As a consulting vertebrate paleontologist working with the oil, gas and mineral industry in eastern Utah providing paleontological salvage and mitigation of scientifically valuable paleontology resources, I can attest to the destructive nature of mineral exploration on paleontological resources. Even with a thorough plan for the salvage and mitigation of fossils discovered during mineral extraction and infrastructure construction there is a large percentage of valuable scientific data lost forever due to the extraction of fossils from their original occurrence within the bed rock. The unique paleontological resources of Ellesmere Island are world renowned for the often fragmentary, but scientifically important Eocene and Pliocene fossils.
These fossils showcase a much warmer climate for the high arctic and provide a rare window into high latitudes about 50 and 4 million years ago. Due to logistics, researchers have had only a limiting availability to work in the area, and numerous discoveries still wait to be discovered in the region. I would recommend that if mineral extraction were to proceed on Ellesmere Island that the region be fully surveyed for paleontological sites. Working with researchers, protected areas be formally recognized based on a detailed map of paleontological resources of the area. Once such a study is completed, areas of low sensitivity would be offered for mineral extraction, leaving scientifically valuable and paleontological sensitive areas to be protected in perpetuity for future research and study.

Sincerely,

Ben

Benjamin J. Burger, PhD.
Paleontology Specialist
SWCA Environmental Consultants
2028 West 500 North
Vernal, Utah 84078
Tel: 435.789.9388 Cell: 303.818.1408

100114-09EN067-C Horrall Comments-IA2E

From: horrallc@gmail.com
Sent: January 13, 2010 5:23 PM
To: info@nirb.ca
Subject: Proposed coal mining exploration - Ellesmere Island

Hello,

I am writing to express my concern about Weststar Resources proposed coal mining exploration project for Ellesmere Island currently under review.

The proposed drilling areas include some of the most important fossil sites in the Arctic including known Pliocene and Eocene fossil sites in the Strathcona Fiord area

I urge the board to recommend to the minister that the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

Regards,
Caitlin Horrall

100115-09EN067-C Stromberg Comments-IA2E

From: Caroline Strömberg [caestrom@u.washington.edu]
Sent: January 15, 2010 2:51 PM
To: info@nirb.ca
Subject: Westar coal project

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,
Caroline Stromberg

Caroline A.E. Strömberg, Ph.D.

Estella B. Leopold Assistant Professor in Biology and Curator of Paleobotany

Department of Biology
University of Washington
Box 351800, 24 Kincaid Hall
Seattle, WA 98195-1800

206. 543. 1687 (office: 406 HCK)
206. 221. 6724 (lab: 406 HCK)
Fax: 206. 685. 1728

Burke Museum of Natural History & Culture University of Washington Box 353010
Seattle, WA 98195-3010

206. 543. 0495
Fax: 206. 685. 3039

caestrom@u.washington.edu

http://depts.washington.edu/strmbrgl/

MUSEUM OF PALEONTOLOGY
THE UNIVERSITY OF MICHIGAN
1109 Geddes Road, Ann Arbor, Michigan 48109-1079 • Phone 734-764-0489 • Fax 734-936-1380

15 January 2010

To the members of the Nunavut Impact Review Board:

I am writing to you about the proposed Westar coal project. As a vertebrate paleontologist and an environmentalist, I encourage you not to approve a permit exploration for coal mining on Ellesmere Island.

I am professor at the University of Michigan with specializations in vertebrate paleontology and environmental science. I am also the recent Past President of the Society of Vertebrate Paleontology. Ellesmere Island is well known for its unique and irreplaceable paleontological resources, which will continue to provide important discoveries for decades to come.

In addition, Arctic ecosystems are vulnerable to environmental degradation, as well as global climate change. The integrity of these ecosystems, as they are shrinking globally, should be protected for the people of Nunavut as well as for the world.

The proposed exploration activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change. If the fossil sites in the Westar coal project areas are destroyed, the evidence is lost forever. If the ecosystem is damaged by coal exploration or mining, then its ecological services are compromised for many generations of people.

I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal should be modified or abandoned.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

Catherine Badgley

Catherine Badgley
Research Scientist
Assistant Professor, Department of Ecology and Evolutionary Biology

100115-09EN067-C Noto Comments-IA2E

From: Chris Noto [chris.noto@gmail.com]
Sent: January 15, 2010 2:43 PM
To: info@nirb.ca
Subject: I oppose coal mining on Ellesmere Island

To Whom It May Concern:

I am writing in regards to a proposed coal mining exploration project for Ellesmere Island (Nunavut). I am strongly opposed to this mining operation. The proposed drilling areas include some of the most important fossil sites in the Arctic including known Pliocene and Eocene fossil sites in the Strathcona Fiord area. Furthermore, such surface mining activities will undoubtedly have an immediate negative impact on the surrounding environment, not to mention long-term effects on the climate due to CO2 produced by burning the coal for energy.

I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6. There are simply too many reasons to allow mining the area at this point and further action is needed to protect this valuable scientific and natural resource.

Sincerely,
Christopher Noto, Ph.D

100115-09EN067-C Adams Comments-IA2E

From: Claudia Schroder-Adams [csadams@earthsci.carleton.ca]
Sent: January 15, 2010 8:35 AM
To: info@nirb.ca
Subject: Proposed Westar coal project on Ellesmere Island

To the members of the Nunavut Impact Review Board,

It has come to my attention that the company Westar has proposed drilling activities for future coal mining on Ellesmere Island targeting Fosheim Peninsula and Strathcona Fjord.

I am writing to you today in my position as a paleontologist at the Department of Earth Sciences at Carleton University in Ottawa. My discipline is microfossils and their contribution to understanding geologically ancient landscapes and climate change. Next summer I will have the privilege to visit the ancient beaver pond site at Strathcona Sound for the first time due to my collaboration with researchers of the Museum of Nature in Ottawa. Future research will bring me to Fosheim Peninsula where Cretaceous sediments are exposed giving a glimpse how the Arctic coped with a Greenhouse climate about 100 to 80 Million years ago.

The fossil sites on Ellesmere Island that have revealed the past landscapes and ecosystems are of extraordinary significance to understand such pressing subjects as climate change. In addition, they represent the Natural Heritage of Nunavut, territorial and Canadian treasures that require protection in order to tell their story to future generations. To understand a future warmer Arctic we can learn from the geological past. The fossil record in the Arctic is the proof of extraordinary ecosystems, that once characterized these regions.
Ellesmere Island is one of the most unique and precious places that has already received abundant international interest.

We geologists work with natural resources, which can be industrially explored for, but also with natural fossil and rock sites that are so significant to science and our understanding of ancient planet earth that we need to protect them for future generations. This is easy to do in southern regions, where many visitors will come to such sites. The Arctic, however, has the most precious sites when it comes to understanding past earth climates and should not be forgotten because the region is remote. Therefore I feel compelled to raise awareness.

By carefully considering all options, I would like to recommend that the Nunavut Impact Review Board advises the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal of Westar requires review under Part 5 or 6.

Thank you for the opportunity to voice my concerns and I remain hopeful that these issues will become part of the review process.

Sincerely,

Claudia Schroder-Adams

--
Claudia Schroder-Adams
Professor

Dept. of Earth Sciences
Carleton University
1125 Colonel By Drive
Ottawa, Ontario
Canada K1S 5B6

Tel.: (613) 520-2600 ext. 1852
Fax: (613) 520-5613

100115-09EN067-D Sharon Comments-IA2E

From: Dan Sharon [dansharon1@yahoo.com]
Sent: January 15, 2010 7:59 AM
To: info@nirb.ca
Subject: concern about the Westar coal project

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

Just a couple of days ago there was a presentation here in Ottawa, on a very important recent fossil find in Nunavut. Until this presentation, I hadn't realized just how important the arctic and paleontology are to understanding climate change.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration.

Sincerely,

Dan Sharon, Software Engineer

321 Kintyre Private,

Ottawa, ON, K2C 3M6

100114-09EN067-D Scott Comments-IA2E

From: David Scott [dbscott@dal.ca]
Sent: January 14, 2010 11:16 AM
To: info@nirb.ca
Subject: letter to Nunavut board

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

I have been doing research in the Arctic for over 20 years and I have an appreciation for exactly how sensitive these environments are, both oceanic and land based. The land based environmental resources (i.e. the unique fossil localities and Inuik sites) are extremely fragile and should not be threatened in any way

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,
Professor David B. Scott

David B. Scott, director (CEMG), Killam Professor, Chair, Earth Sciences Dept.
Centre for Environmental and Marine Geology
Department of Earth Sciences
Dalhousie University
Halifax, Nova Scotia B3H 3J5 CANADA
PH: 902-494-3604; FAX: 902-494-3877/6889
email: dbscott@dal.ca
http://earthsciences.dal.ca/people/dbscott/scott_db.html
NAPC2005:http://meguma.earthsciences.dal.ca/napc/napc2005-s.htm

100115-09EN067-D Dobry Comments 2-IA2E

From: David Dobry [davetaos@cybermesa.com]
Sent: January 15, 2010 11:57 AM
To: info@nirb.ca

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

My name is David Dobry from Questa NM - I have been interested in paleontology since a child and these important sites have to be protected so that we can study different climate impact on our planet.
The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

100114-09EN067-D Brinkman Comments-IA2E

From: Don Brinkman [Don.Brinkman@gov.ab.ca]
Sent: January 14, 2010 1:18 PM
To: info@nirb.ca
Subject: letter of concern regarding coal mining

Greetings:

I am writing to express my concern regarding the impact that the proposed coal mining exploration project for Ellesmere Island would have on fossil localities in this region. These localities are of global significance in documenting the effects of climate change during the last approximately 50 million years. I strongly urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts

Yours truly,

Donald Brinkman

Director Preservation and Research

Royal Tyrrell Museum

Box 7500, Drumheller, AB, T0J 0Y0

Phone: (403) 820-6214

Fax: (403) 823-7131

100115-09EN067-E Buffetaut Comments-IA2E

From: eric buffetaut [eric.buffetaut@sfr.fr]
Sent: January 15, 2010 6:07 AM
To: info@nirb.ca
Subject: Ellesmere Island palaeontological sites

To whom it may concern,

The fossil localities of Eocene age on Ellesmere Island are of considerable importance for our understanding of the evolution of environments and living assemblages during a key period of Earth history. Their Arctic location makes them unique for an investigation of the influence of past climates on the distribution of plants and animals. It is therefore essential that these localities should be preserved for future research. Canada has a long tradition of successful preservation of its geological and palaeontological heritage, as shown by world-famous protected areas in several provinces (Miguasha in Quebec, Dinosaur Provincial Park in Alberta, Mount Burgess in Birtish Columbia, etc.). The localities on Ellesmere Island provide an opportunity for the conservation of a similarly important site in Nunavut.

I therefore recommend that Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4.(b) of the Nunavut Claim Agreement, that the project proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review.

Sincerely,

Dr Eric BUFFETAUT

Palaeontologist, National Centre for Scientific Research (CNRS)

Laboratoire de Géologie de l'Ecole Normale Supérieure, 24 rue Lhomond, 75231 Paris Cedex 05, France

Telephone: (33) 01 77 85 24 99

100114-09EN067-F Dalla Vecchia Comments-IA2E

From: Fabio Dalla Vecchia [fabdalla@tin.it]
Sent: January 14, 2010 10:02 AM
To: info@nirb.ca
Subject: On the coal mining exploration project for Ellesmere Island (Nunavut)

To the Nunavut Impact Review Board (NIRB):

Sir,
I urge protection of the paleontological sites that the coal mining exploration project would damage, including the Pliocene and Eocene fossil sites in the Strathcona Fiord area, and recommend that the Nunavut Impact Review Board advises the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.

Sincerely

Fabio M. Dalla Vecchia, Ph.D.

Fabio M. Dalla Vecchia
Institut Català de Paleontologia (ICP)
Edifici ICP
Universitat Autònoma de Barcelona
E-08193 Cerdanyola del Vallès
Barcelona
SPAIN

100115-09EN067-F Quesnel Comments-IA2E

From: Quesnel Florence [f.quesnel@brgm.fr]
Sent: January 15, 2010 10:39 AM
To: info@nirb.ca
Subject: letter of concern - Nunavut Claim Agreement

To whom it may concern,

Some palaeontologists colleagues informed me of a coal mining exploration project in the Eocene strata of Ellesmere Island (Nunavut).
I'm involved in a pluridisciplinary Research project dealing with similar lignitic deposits in NW Europe, whose main purpose is to study the impact of paleoclimatic extreme events in the various terrestrial paleoenvironments and biota. In our sedimentologic, stratigraphic, geochemical and palaeontological approaches, we very often compare our results with data acquired elsewhere, from the poles to the equator of that times. And we collaborate with climatic modellers who need worldwide records for their simulations and modelling.

The lignitic sediments and fossil localities of Eocene age on Ellesmere Island are thus of considerable importance for our understanding of the evolution of environments and living assemblages during a key period of Earth history. Indeed between the K/P boundary and the end of the Eocene, the Earth atmosphere was much warmer than today, dominated by greenhouse gazes, and the poles without ice caps. The paleo-arctic location of the Ellesmere Island makes them unique for an investigation of the influence of past climates on the distribution of plants and animals. Moreover the data which can be collected there are critical for paleoclimatic reconstructions and modelling studies of the earth-atmosphere system interactions and regulation.

It is therefore essential that these localities should be preserved for future research. Canada has a long tradition of successful preservation of its geological and palaeontological heritage, as shown by world-famous protected areas in several provinces (Miguasha in Quebec, Dinosaur Provincial Park in Alberta, Mount Burgess in British Columbia, etc.). The localities on Ellesmere Island provide an opportunity for the conservation of a similarly important site in Nunavut.

I therefore recommend that Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4.(b) of the Nunavut Claim Agreement, that the project proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review.

Best regards,

flox

Dr Florence QUESNEL

BRGM GEO/G2R

BP 36009

F 45060 ORLEANS CEDEX

FRANCE

tel : 00 33 (0)2 38 64 38 80

fax : 00 33 (0)2 38 64 33 33

mobile : 00 33 (0)6 07 23 67 84

100114-09EN067-G Weber Comments-IA2E

From: Gae Weber [gaeashly@comcast.net]
Sent: January 14, 2010 10:41 PM
To: info@nirb.ca
Subject: Mining on Ellesmere Island

Dear Sir and/or Madam,

I am writing to urge you to pursue drilling and mining in other, less sensitive areas than those proposed on Ellesmere Island. Some of the proposed sites contain an irreplaceable fossil heritage. At the very least, further study of these sites is necessary as per Part 5 or 6, Article 12.4.4(a) of the Nunavut Land Claim Agreement. I urge you--do not take steps that can never be reversed, destroying a historical record that can never be replaced.

Thank you for your attention to this important issue.

Sincerely,

Gae A. Weber

100115-09EN067-G Trick Comments-IA2E

From: gtrick@mts.net
Sent: January 15, 2010 7:40 PM
To: info@nirb.ca
Subject: Mining,Ellesmere Island

I fully support the views expressed by Mary Dawson in her communication of Jan 13 and ask that appropriate action be taken Gordon S Trick Ph.D.(Retired Executive Director,Manitoba Research Council)

Department of Biological Sciences
Brock University, 500 Glenridge Avenue
St. Catharines, Ontario, Canada
L2S 3A1

January 15, 2010.

Nunavut Impact Review Board
<info@nirb.ca>
fax (867) 983-2594.

Dear NIRB;

I write to express my deep concern about Westar's proposed coal mining exploration project in the Strathcona Fiord area of Ellesmere Island, presently under review by the Nunavut Impact Review Board. The area includes paleontological sites of international significance, and in my opinion it has the same significance as the famous Burgess Shales of southern B.C. At least 30 known fossil sites occur in the coal license area.

Eocene age fossil sites on Ellesmere Island are of major importance for understanding the early "Age of Mammals" and for understanding climate change in the Arctic. Southern Ellesmere Island produced the spectacular Devonian-age Canadian fossil "Tiktaalik", an important link in the evolution of four-limbed amphibians from fish. Tiktaalik entered textbooks almost immediately after its discovery and had widespread media attention (http://en.wikipedia.org/wiki/Tiktaalik).

Present-day Ellesmere Island has permafrost, sparse vegetation, and few animal species. During the Eocene Age, 50 to 50 million years ago, the area was only 2^{o} further south than today, but high greenhouse gas levels resulted in a subtropical climate. Axel Heidelberg and Ellesmere Island have produced Eocene-age fossils of oak and redwood trees, and animals including snakes, alligators, primates, and tapirs. In our present time of greenhouse gas-induced climatic change, paleontological and paleoclimatic evidence from the area is highly important. High latitudes experience greater climatic changes than regions nearer the equator during global temperature shifts, and Ellesmere Island provides unique evidence about processes and effects of Eocene-age climate change in the Arctic to which our modern data are compared.

Forty scientific manuscripts based on the area's paleontology have been published, including in the prestigious journals Nature and Geology. Active paleontological research continues in the area, including collaborations with climate modelers.

Under the Nunavut Land Claim Agreement (NLCA), I hope that NIRB would recommend to the Minister a 12.4.4.d recommendation as follows:

> 12.4.4 Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:
>
> (d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

I am an LT Assistant Professor of Biology at Brock University, with published paleontological papers and excavation experience in the Yukon, Alberta, California, and Egypt. I appreciate your attention to this letter. Feel free to contact me.

Yours sincerely,

Grant Hurlburt, Ph. D. (University of Toronto)
H. 905-522-8621
W. 905-688-5550 Ext 3192
<granth70@yahoo.ca>

Hans C. E. Larsson

Associate Professor and Canada Research Chair in Macroevolution
Redpath Museum, McGill University
859 Sherbrooke Street West
Montreal, PQ, Canada H3A 2K6

tel: (514) 398-4086 x089457
e-mail: hans.ce.larsson@mcgill.ca

15 Jan 2010

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

My concerns stem from some years of work I have done in the region working on Mesozoic aged rocks and their fossils in the arctic.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article **12.4.4(b)** of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

Hans Larsson

University of Colorado at Boulder
Museum - Paleontology Section
265 UCB
Boulder, Colorado 80309-0265

January 14, 2010

To the members of the Nunavut Impact Review Board,

Thank you for the opportunity to write to you concerning the proposed Westar coal project at Strathcona Fiord on Ellesmere Island.

I am a Canadian paleontologist and professor at the University of Colorado at Boulder. For over a decade, I have conducted paleontological research in the Canadian Arctic, including several field seasons near Strathcona Fiord on Ellesmere Island. There is mounting evidence from both science and traditional knowledge that shows that the Earth's climate is changing, and arguably the greatest impact of this climate change is being felt in the Arctic as the ice disappears and the animals change their migration patterns. Our knowledge of ancient animals that lived in the Arctic millions of years ago during times of global warmth have proved critical to understanding the impacts of global warming on today's Arctic plants and animals.

In May 2008, I had the opportunity to visit several elementary and high schools in Iqaluit, Apex, and Pangnirtung to talk about the ancient plants and animals that once inhabited Ellesmere Island. The Nunavut schoolchildren were among the best audiences I have ever experienced because they were excited to learn about the alligators and trees that once inhabited their lands, and they were proud of the natural history preserved in the rocks on Ellesmere Island. The fossils at Strathcona Fiord are not only world-renowned to science, but just as important, they are a part of Nunavut's heritage and a legacy for generations of Nunavut children. These fossils, and the clues they reveal about Nunavut's ancient past, are irreplaceable.

If the fossil sites in the Westar coal project areas are destroyed, the evidence is lost forever. Therefore, I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and ask that you please keep me informed of the results of this screening process. If I can assist in providing information about the fossil sites at Strathcona Fiord, please contact me (Jaelyn.Eberle@Colorado.edu).

Sincerely,

Jaelyn J. Eberle
Asst. Professor, Geological Sciences and University of Colorado Museum of Nat. History

From: Basinger, James [jim.basinger@usask.ca]
Sent: January 15, 2010 11:28 AM
To: info@nirb.ca
Cc: Ross, Julie; Natalia Rybczynski; Basinger, James
Subject: Re: Westar exploration, Ellesmere Island

Please note that I have corrected my reference to article 12.4.4(b) in my memo. Please accept my apologies.

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project, which involves exploration and potential mining activity on Ellesmere Island.

I am a Professor of Geological Sciences at the University of Saskatchewan, and have carried out a program of research on fossil plants from the High Arctic since 1982. I have conducted 20 summer field programs in the north, and have extensive experience on Ellesmere and Axel Heiberg islands. On Ellesmere Island, I have concentrated my efforts on the coal-bearing rock units of the Baumann and Strathcona fiord areas of southern and central Ellesmere, the Fosheim Peninsula of western Ellesmere, Bache Peninsula of eastern Ellesmere, and the Judge Daly Promontory and Hazen Plateau of northeastern Ellesmere. I am familiar with the areas identified for exploration licences by Westar Coal.

My interest is in the fossil plants and fossil forests of the far north during the last globally warm period in earth history, from about 60 to 40 million years ago. The deposits on Ellesmere Island are particularly important, as they preserve some of the world's best records of high-latitude fossil plants, and provide us with enormously important insights into the ecosystems of a world much warmer than present. I am also very interested in mechanisms of climate change, and believe that it is essential to understand how climate changes under natural processes if we are to comprehend the impact that humans may have on global climate. Again, because the polar regions respond most strongly as global climate changes, the Ellesmere Island fossil resources provide us with a most important perspective on global climate evolution and is causes.

The proposed activities by Westar could damage or destroy fossil sites that form an important part of Nunavut's historical heritage. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance.

If the fossil sites in the Westar coal project areas are destroyed, the evidence is lost forever. It is important that these fossil resources are discovered, studied, and recovered for future generations of students and researchers. In some cases, there may be strong arguments for preservation of particularly important and valuable fossil sites. I therefore recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and I request that you keep me informed of the results of this screening process.

Sincerely,

--
James F. Basinger
Acting Associate Vice-President Research University of Saskatchewan Rm. 201.1
College Building
107 Administration Place

Saskatoon, SK S7N 5A2
Canada

Ph. (306) 966-1615
FAX (306) 966-8736
E-mail: jim.basinger@usask.ca

100114-09EN067-JL Gillete Comments-IA2E

From: jan lynett gillette [jlynettg@simplyweb.net]
Sent: January 14, 2010 10:23 AM
To: info@nirb.ca
Subject: coal exploration on Ellesmere Island

To Nunavut Impact Review Board (NIRB):

This letter is in regard to a proposal for exploratory drilling for coal on Ellesmere Island. As a paleontologist who has worked with Eocene and Pliocene fossils, I have deep concern for the Eocene and Pliocene fossil-rich strata which may be destroyed by such activities, especially in the Strathcona Fiord area and in similar horizons elsewhere. The Nunavut ecosystem in its entirety contains fossils, testimony to the rich earth history that only that area can reveal. Modern studies of climate change, faunal migrations and adaptations have benefitted from knowledge of this region; loss of the further insights surely contained therein should be avoided. As a result, I urge protection of these sites and recommend that the NIRB advise the Minister (relative to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.

Sincerely,

J. Lynett Gillette

2567 Antiem St.

San Diego, CA 92111

100115-09EN067-J Pappas Comments-IA2E

From: Janice Pappas [jlpappas@umich.edu]
Sent: January 15, 2010 1:55 PM
To: info@nirb.ca
Subject: Re: Nunavut paleontological heritage

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

I am a research scientist in paleontology at the University of Michigan in Ann Arbor, Michigan, USA. One of the most precious things we have on Earth is our connection to the land and what the land means to us throughout our history. An important aspect of the land is the fossils and what they can tell us about ourselves and the land we inhabit.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

Janice L. Pappas, Ph.D
Museum of Paleontology
University of Michigan
1109 Geddes Ave.
Ann Arbor, Michigan 48109-1079
USA

100114-09EN067-J Lee Comments-IA2E

From: Jean P Lee [ew126@ncf.ca]
Sent: January 14, 2010 10:05 AM
To: info@nirb.ca
Subject: Coal Mining Liscences Approved at Fossil Sites on Elllesmere Island

January 14, 2010

Nunavut Impact Review Board,

Dear Board Members,

I was recently at a lecture given by Dr. Natalia Rybczynski on January 13, 2010 hosted by the Eastern Ontario Society for Natural History and Paleontology. It was an informative lecture where we learned that Ellesmere Island where this scientist has made world renowned discoveries is a very important place for the studies of evolutionary change. Since 1975, when American scientists dicovered fossil remains of an alligator from the Eocene period, many mammal and tree fossils have been found there, to support the hypothesis that the Arctic was once a warm temperatured flourishing forest. Not only are these sites important for understanding the Earth's past, but are valuable for studies on changes in biodiversity and the climate of today.

Unfortunatley, we were also informed that Westar has been given approval for coal mining licenses on Ellesmere Island. They include the Strathcona Fiord and Fosheim Peninsula, important fossil sites.

I would hope that NIRB would rcommend to the Minister at the Department of Indian and Northern Affairs, a 12.4.4 recommendation, namely sections b and d.

(b) the proposal requires review under Part 5 or 6, NIRB shall identify particular issues or concerns which should be considered in such a review.

(d)the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned

I am very concerned as such world repected work is being carried out in the Canadian Arctic and this should be supported and land sites be protected for the work.

Thank you!

Yours Sincerely

J P Lee

(M.Sc.)

100115-09EN067-J Martin Comments-IA2E

From: JEREMY MARTIN [martin@univ-corse.fr]
Sent: January 15, 2010 2:16 AM
To: info@nirb.ca
Subject: letter of concern - Nunavut Claim Agreement

To whom it may concern,

I have recently become aware of the problematic situation arising in Ellesmere island. I am greatly concerned because this area has tremendous importance for international comprehension of natural history and diversity of Northern environments. I am currently involved in studies aiming at understanding how life could cope with the climatic conditions 55 myr ago in Western Europe, which is comparable in age to Ellesmere Island localities. Myself and many colleagues consider the sedimentary deposits of Ellesmere island and its associated fossil organisms to be an invaluable source of comparative information for this dramatic period in the history of life. I appreciate Canada's effort to preserve fossil sites in its territories and provinces (e.g. Burgess shale in British Columbia). I believe that fossil localities of Ellesmere island also deserve protection and actions should be taken to make such protection possible.

For these reasons, I recommend that Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4.(b) of the Nunavut Claim Agreement, that the project proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review.

Sincerely,

--
Dr. Jeremy Martin
Paléontologue
Laboratoire de géologie
Université de Corse-20250 Corté
France

100115-09EN067-J Hooker Comments-IA2E

From: Jerry Hooker [j.hooker@nhm.ac.uk]
Sent: January 15, 2010 5:44 AM
To: info@nirb.ca
Subject: Threat to Ellesmere Island (Nunavut) fossil sites by coal mining

Dear Sirs,

I write regarding the coal mining exploration project for Ellesmere Island (Nunavut) proposed by Westar. My research area is in extinct mammals, particularly those of the Eocene epoch and the palaeoclimatic implications of their ancient communities. I have published extensively in this subject area in peer-reviewed journals and books. I am therefore very aware that the Eocene mammal faunas and their associated floras of the Strathcona Fiord area are critical to an understanding of ancient climates at high latitudes during the last globally ultra-warm interval 50-55 million years ago. I understand that the future of palaeontological collecting and research in the Strathcona Fiord area is threatened by the proposed coal mining project.

At a time when climate scientists are warning that the world needs to reduce radically its CO2 emissions, it is difficult to believe that there should be a major new project on coal extraction, which at the same time impacts negatively on our attempts to understand the pattern and process of past global warming, a phenomenon we are trying to mitigate in the here and now. I would therefore hope that NIRB would recommend to the Minister a 12.4.4(b) recommendation of the Nunavut Land Claim Agreement with regard to this proposal.

Yours faithfully,

Dr J.J. Hooker

100114-09EN067-J Theodor Comments-IA2E

From: jtheodor@gmail.com on behalf of Jessica Theodor [jtheodor@ucalgary.ca]
Sent: January 14, 2010 12:43 PM
To: info@nirb.ca
Subject: Ellesmere Island Mining

Dear Nunavut Impact Review Board members,

I am writing to comment on the proposed coal mining exploration project on Ellesmere Island. The proposed drilling area includes a number of important fossil sites in the Arctic, including Pliocene and Eocene sites in the Strathcona Fiord area (for example, a unique fossil forest dating to roughly 50 million years ago documenting a warm polar climate). These sites are scientifically important, especially with regard to understanding the long term impact of climatic changes on the biota in Canada's north.
I strongly urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

Your sincerely,

Jessica Theodor
_____
Associate Professor
Biological Sciences
University of Calgary
2500 University Dr. NW
Calgary AB T2N 1N4
(403) 210-9819

100014-09EN067-J Chen Comments-IA2E

From: Jing & Glenn [jingglenn@rogers.com]
Sent: January 14, 2010 7:16 PM
To: info@nirb.ca
Subject: Concerns about the Proposed Coal Mining Exploration for Ellesmere Island

Dear Sir/Madam,

I am writing to you to raise my deep concerns on the proposed coal mining exploration project. Approval of this project means to allow the destroy of the priceless paleontological evidences that Ellesmere Island has to offer to the world. My 7-year old son has great passion on paleontology and is working hard to build skills to be able to contribute to the world someday in future. I don't want to see that he has no significant paleontological resources such as Ellesmere Island to research with.

I hope that NIRB would recommend to the Minister a 12.4.4 "d" recommendation in the NCLA.

Thanks in advance for your empathy of my above concerns and your support.

Regards,

Jing Chen

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

I am Joanna Northover, an M.Sc Earth Science student from Carleton University. This summer, my field work took me to Devon Island, Nunavut, where I was able to learn valuable paleontological skills in one of the most beautiful places in Canada. I also participated in the Polar Continental Shelf Program's Open House where I presented the results of our 2009 field work to the welcoming Inuit community of Resolute. I am very grateful for the unique opportunity I have received to studying fossils from the Canadian Arctic.

My research focuses on a Nunavut fossil carnivore, *Puijila darwini*, which has revolutionized the current understanding of the origin of pinnipeds (seals, sea lions and walrus). The discovery of this missing link fossil in the arctic was truly remarkable and proved the importance of Nunavut's paleontological heritage to the world. How many other such significant fossils are waiting to be found? Many fossil sites in the Arctic represent unique ecosystems, where new life strategies were able to evolve. These exceptional circumstances created endemic species, which will be found nowhere else on Earth. If *Puijila* is any indication, these unique fossil specimens are invaluable to understanding the origin of modern groups of animals and the history of life.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils sites tell us about an especially important time in the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

Joanna Northover, B.Sc
M.Sc Candidate, Carleton Univeristy,
Ottawa, Ontario

January 14, 2010

DALHOUSIE UNIVERSITY
Inspiring Minds

Faculty of Science
Earth Sciences
Dal-CNEF

To the members of the Nunavut Impact Review Board,

I wish to convey in writing my concerns of the proposed Westar coal project.

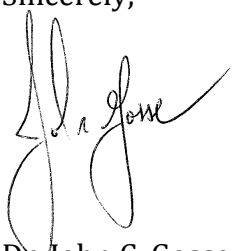
As a geologist and a Newfoundlander, I have an appreciation for the importance of mining on the economy of remote towns. Not only is there short term employment, but large cash flows directly benefit the region's schools, clinics, public programs, among others. Many of my geology students look forward to working with industry. However, having been raised on the land with my parents who hunted and fished, and having worked in the Arctic and northern Labrador since the late 1980's as a student and now professor, I also have a great appreciation for the value of the life and the rocks of the northern land. We all have some responsibility to protect our land so Inuit children and Canadian and foreign visitors can also appreciate its beauty and uniqueness. Having hiked around Strathcona Fiord and the Fosheim Peninsula, I am also aware of the significance of the fossil record that is at risk here. In my opinion, it is far more important than the short-term benefits from the coal mining.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

Your efforts may also help sustain a longer-term industry that has begun to flourish in the Arctic: tourism. I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,



Dr. John C. Gosse
Canada Research Chair—Earth Systems Evolution
Associate Professor, Earth Sciences
Director, Dalhousie Geochronology Centre
Council member, Geological Association of Canada

Dr. John Gosse • Room 3006, Life Sciences Centre • Dalhousie University • Halifax, NS B3H 3J5 Canada
Tel: 902.494.2358 • Fax: 902.494.6889 • E-mail: John.Gosse@Dal.Ca • Web: geochronology.earthsciences.dal.ca

100114-09EN067-J Storer Comments-IA2E

From: John Storer [john.storer@dccnet.com]
Sent: January 14, 2010 4:32 PM
To: info@nirb.ca
Subject: Review of coal mining proposal for Strathcona Fiord

Dear members of the Nunavut Impact Review Board:
Regarding the project proposal by Westar Resources, currently under review by NIRB, for coal mining at various sites along Stathcona Fiord, Ellesmere Island:
I have been informed that known sites preserving fossil mammals and other vertebrates of Eocene and Pliocene age are included among the proposed mining sites. These are among the most important fossil localities in the Arctic. They give us our only view of life on the land for a vast area of the world, for this period. I know this, because for nearly forty years I studied the fossil mammals that lived in more southern parts of Canada at the same times, and came to appreciate the immense value of the Nunavut sites. The Nunavut sites preserve an entirely different fauna than we find farther south, from completely different environments.
I respectfully urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.
Thank you for the opportunity to provide input on this proposal.
John E. Storer, PhD

--
John Storer
6937 Porpoise Drive
Sechelt BC V0N 3A4

100114-09EN067-J Perry Comments-IA2E

From: Perry, Jonathan [jperry@midwestern.edu]
Sent: January 14, 2010 12:28 PM
To: info@nirb.ca
Subject: drilling project on Ellesmere Island

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

I am a paleontologist who works on the origins of primates and has a particular interest in fossils of the Eocene epoch. Please carefully consider the following. The proposed coal mining exploration project for Ellesmere Island threatens several key Pliocene epoch and Eocene epoch fossil sites. These sites have yielded some of the most important fossil specimens known from Canada. These key fossils have enabled paleontologists to track the evolution of mammals in the high arctic and have led to a better understanding of climate change in this critical, fragile environment.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your time.

Sincerely,

Jonathan Perry, Ph.D.

100114-09EN067-J Sullivan Comments-IA2E

From: joesul1262@aol.com
Sent: January 14, 2010 1:13 PM
To: info@nirb.ca
Subject: Fossil sites-

Dear Folks,

Please remember the fossil sites in that area on or near the proposed mining . Once this area is ravaged it is gone forever and besides fossil fuels is not the way to go.

Thank You for the time to read this e-mail. Mr. Joseph S. Sullivan

100113-09EN067-K Rose Comments-IA2E

From: Ken Rose [kdrose@jhmi.edu]
Sent: January 13, 2010 10:27 AM
To: info@nirb.ca
Subject: Nunavut Coal Exploration

Importance: High
January 13, 2010

To the Nunavut Impact Review Board:
info@nirb.ca

I write with great concern for areas of special interest to paleontologists, geologists, and natural historians in Nunavut (Ellesmere Island). Proposals for coal mining exploration in the Strathcona Fiord area could have serious negative impact on, or even destroy, fossil deposits of international importance. These deposits have produced a wealth of fossils that have significantly expanded our understanding of the evolution of vertebrates, particularly mammals, during the beginning of the Age of Mammals. More important, the Nunavut fossil beds provide a unique window on dispersal of faunas between Europe and North America at that time, shedding light on distribution patterns of animals that influence even present-day faunas. Exploration for coal without regard for the world-class significance of the fossil beds of Nunavut would be a grievous oversight and a natural tragedy of epic proportion. I hope that the NIRB will forward to the Minister a 12.4.4.d recommendation.

Sincerely,

Kenneth D. Rose, Professor
Center for Functional Anatomy & Evolution
Johns Hopkins University School of Medicine
1830 East Monument Street
Baltimore, MD 21205

Telephone: 410-955-7172 Fax: 410-614-9030
E-mail: kdrose@jhmi.edu

Research Associate, National Museum of Natural History, Smithsonian Institution, Washington, D.C., and
Carnegie Museum of Natural History, Pittsburgh, Pennsylvania

100114-09EN067-L Mishkin Comments-IA2E

From: Lee Mishkin [lee_mishkin@hotmail.com]
Sent: January 14, 2010 11:30 AM
To: info@nirb.ca
Subject: Coal Mining project for Ellesmere Island

Dear NIRB,

Drilling/coal mining in the Strathcona Fiord area of Ellesmere Island risks destroying important Pliocene and Eocene fossil sites.

As a member of the Society of Vertebrate Paleontology, I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.

Thank you.

Lee Mishkin
Buffalo Grove, Illinois

Yale University

Department of Geology and Geophysics
Kline Geology Laboratory
P.O. Box 208109
New Haven, Connecticut 06520-8109
U.S.A.

Campus address:
Kline Geology Laboratory
210 Whitney Avenue
203 623-9542
FAX 203 432-3134

January 15, 2010

Nunavut Impact Review Board (NIRB)

Dear Members of the Board;

I write to express my great concern that a precious area of paleontological resources is imperiled by the plans of the Westar Coal Company to drill and exploit the region of Ellesmere Island starting inland from the south shore of Strathcona Fiord and extending to the south shore of Bay Fiord. My specific concern centers on the lease-blocks labeled NU-Coal#106, NU-Coal#107, and NU-Coal#108.

These blocks lie precisely in the discovery area and richest deposits of Tertiary-age vertebrate fossils in the Canadian Arctic. Not only do these include the three-toed horses and alligators of popular accounts, but the fossils of a group related to bats and primates that survives today only in the Philippine Islands. This region is highly unusual as well because it provides the only integrated fossil record of animal and plant fossils. This makes the area of enormous value in reconstructing the environmental conditions of the Arctic. Much has been made of the marvelous fossil forests of Axel Heiberg Island, but to date, no fossil vertebrate fossils have been recovered from the area.

In addition to its value as a paleontological resource, this region also provides the best terrestrial context for reconstructing the climatic and biotic changes that took place just before, and during the so-called Eocene Thermal Maximum, when the Arctic had a greenhouse climate. When this record is linked to the marine record, now being assembled from cores in the Arctic Ocean, it will provide a powerful context for evaluating the environmental changes that took place when there was essentially no ice in the Arctic. It seems paradoxical to me that, just when these data are urgently needed by the scientists and policy-makers, the terrestrial data repository of this information should be threatened by a coal company.

In light of these grave concerns for this irreplaceable area I respectfully urge that NIRB would recommend to the Minister under Article 12.4.4. option (b) that "the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review."

Sincerely yours,

Leo J. Hickey
Professor of Geology
Curator of Paleobotany

100115-09EN067-L Kuizon Comments-IA2E

From: lkuizon@aol.com
Sent: January 15, 2010 8:54 AM
To: info@nirb.ca
Subject: Proposed Coal Mine on Ellesmere Island

To the Nunavut Impact Review Board:

I am writing to the Nunavut Impact Review Board to voice my concerns about the proposed coal mine project on Ellesmere Island.

First, there will be adverse impacts to critically important paleontological (i.e., fossil) resources on Ellesmere Island and vicinity. The paleontological discoveries there have been very recent -- within the last 50 years or so -- and are critical to the understanding of what life was like on Earth at that time; and what happened to animal populations at the time as a result of changes in climate. Study of these paleontological resources during these important epochs of climate change will lead to a better understanding of what are the causes and impacts of climate change on Earth without the influence of human activity. That scientific research is critical to being able identify the natural causes of climate change so that they can be separated out from climate change caused by human activity.

In addition, this area is also critical for understanding the later spread of humans into the North American continent. Deciphering the geomorphology, or landforms and topography, that aided in the spread of humans is critical for understanding how the First Americans populated North America.

Also, the location of this coal deposit so far from the main centers of population that would benefit from the generation of energy from coal would greatly add to the mining, transportation, and transmission costs of developing such a deposit. In addition, most of the countries of the world are trying to alleviate man's impact to global climate change and look at new ways of generating energy that is less harmful to Earth, its atmosphere, and its people.

Finally, mining would have a great impact on national parks in Nunavut and the wildlife and other natural resources that they protect.

In accordance with Article 12 of the Nunavut Land Claim Agreement and the authority of the Nunavut Impact Review Board, I recommend that the Board find the project unacceptable because the potential adverse impacts of the mining proposal to the paleontological resources, to other scientific studies, and the environment are so harmful that the proposal should be rejected and abandoned.

Sincerely,
Lucia Kuizon

100115-09EN067-M Madsen-IA1E

From: Sarabjot Kaur Madsen [sarabjot108@gmail.com]
Sent: January 14, 2010 12:34 PM
To: info@nirb.ca
Subject: STOP proposed coal mines

Dear members of the Nunavut Impact Review Board,

I urge protection of the proposed coal mine sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.

I am just reading the book by Dr. Neil Shubin, The Inner Fish, that details the amazing understanding we humans have learned about ourselves and our history from a remarkable fossil, Tiktallik, found on Ellesmere Island. While this ancient Devonian fish is much older than the rocks with the coal resources, it illustrates a fundamental value of fossils. The knowledge contained in the fossils in your land has already proven to be remarkable; destroying fossil resources is a lose of cultural knowledge and heritage for the entire human species.

Furthermore, by choosing to develop coal as a source of power, you are supporting the manmade effects leading to global climate change. The polar regions will/are suffering some of the greatest effects of these changes. I believe it is not in your community's best interest (nor the world's) to maintain our dependency on the dirtiest source of energy.

The Navajo and Hopi tribes, through the Just Transition Alliance, are looking to employ their people and provide revenues to the tribes via developing alternate energy instead of continuing the destruction wrought by Peabody Coal Company. I encourage you, like them, to explore other, more sustainable means of financial development for your community.

Respectively,

Margaret Madsen, M.S.

Salt Lake City, UT

Member of the Society of Vertebrate Paleontology

CONCORD FIELD STATION
HARVARD UNIVERSITY
OLD CAUSEWAY RD. BEDFORD, MA 01730
TEL 781.275.1725
FAX 781.275.9613

January 14, 2010

Nunavut Impact Review Board (NIRB)
#102 - 5201 Franklin Avenue
Yellowknife, NT X1A 3S9
Canada

RE: Proposed coal mining exploration project for Ellesmere Island

To Whom it May Concern,

As a scientist and a Canadian I am deeply concerned about the proposed coal mining exploration project for Ellesmere Island. I have been lucky enough to be a part of several palaeontological explorations in Canada's high arctic and the importance of this region to the field of palaeontology cannot be overemphasized. The proposed drilling areas include some of the most important fossil sites in the Arctic including known Pliocene and Eocene fossil sites in the Strathcona Fiord area.

I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts. In the very least the project requires review pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement under part 5 or 6.

Please feel free to contact me if you have any questions or would like to speak more on this matter.

Sincerely,

Maria deBoef Miara

Dr. Maria de Boef Miara, PhD
Post Doctoral Fellow
Harvard University

CARNEGIE MUSEUM OF NATURAL HISTORY

4400 Forbes Avenue
Pittsburgh, PA 15213-4080
Fax 412 622 8837
http://www.cmnh.org

January 13, 2 010

To the Nunavut Impact Review Board

From Mary R. Dawson, Ph.D.
Curator Emeritus
Vertebrate Paleontology
Carnegie Museum of Natural History

I write in regard to a proposed coal mining exploration project from Weststar Resources that would adversely impact sensitive areas in Nunavut. Of particular concern are the following areas on Ellesmere Island: the Strathcona Fiord-Bay Fiord area; Stenkul Fiord; Swinnerton Peninsula. These areas should be excluded from commercial disturbance due to their immensely high scientific value, specifically for their fossil content. Let me clarify.

There is only one place in the world within the Arctic Circle that has yielded a fossil record of land animals that lived between about 55 and 50 million years ago, the Canadian High Arctic islands. This fossil record is best known in the large anticline that extends from southwest of Strathcona Fiord across to Bay Fiord. Similarly aged deposits are known from the Mokka Fiord area of Axel Heiberg Island and from Stenkul Fiord and Swinnerton Peninsula, farther south on Ellesmere Island. These areas also contain a remarkable record of fossil plants. Because the time represented, 55 to 50 million years ago, is just after a climatic warming event known as the early Eocene climatic optimum, these fossil plants and animals contribute to studies of climatic change, especially warming.

The discovery of these fossil vertebrates stems back to 1975, when my colleague R.M. West and I discovered the first evidence of Eocene Arctic land vertebrates. The scientific impact of this discovery was so high that in 1981 co-discovers R.M. West and I were awarded the prestigious National Geographic Society Arnold Guyot Memorial Award for outstanding contributions to geology and paleontology of the High Arctic.

Our exploration showed that the large anticline extending from Strathcona Fiord across to Bay Fiord had exposures of the Eureka Sound Group that contain rare fossil vertebrates. The fauna extends across vertebrate groups, including fishes, amphibians, reptiles, including numerous turtles and tortoises and a crocodilian, birds, and a variety of mammals. The composition of the total vertebrate fauna differs importantly from contemporaneous faunas from south of the Arctic Circle. Subsequent paleontological

exploration has shown that all kinds are new at least at the species level, known only from this remarkable area. The fossils, which are currently curated by the Canadian Museum of Nature, contain a unique mixture of kinds known from nowhere else on earth. Their kinds – including salamanders, a crocodilian, and warm climate mammals, indicate that the high Arctic of that time had a warm temperate climate, even though it had the characteristic light conditions of the Arctic. Over 40 scientific papers have been published so far based on the plants and animals of this area. Even as recently as 2002, new kinds of animals have been discovered through paleontological collecting in the Strathcona-Bay Fiord area.

Subsequent to the discoveries in the Strathcona Fiord-Bay Fiord areas, approximately contemporaneous fossil faunas were discovered in the areas of Stenkul Fiord and Swinnerton Peninsula. It should be noted that the Stenkul Fiord fossil forest is also of historic significance, having been mentioned by geologist Per Schei of the Sverdrup Expedition.

The scientific significance of the Eocene vertebrates of Ellesmere Island cannot be overestimated. This is the only record of these vertebrates from anywhere in the world; they continue to contribute to interpretations of biotic changes due to extreme climate change; they are unique in contributing to understanding of land connections and faunal migrations across the North Atlantic area in the Eocene. Destruction of their source rocks would be a scientific outrage!

More recently discovered is another deposit in the Strathcona Fiord region of younger Tertiary age: the incredible Beaver Pond locality of late Miocene or early Pliocene age, about 5 million years old. Here are preserved not only beaver-chewed wood but also the beaver and other vertebrates that lived around the beaver pond! Unique to the area is a strange small deer-like animal , a bear and a mustelid (weasel-wolverine family) that appear to be related to animals from Asia, a horse, a shrew that appears to be a plant-eater. Again, the Arctic of 5 million years ago has shown itself to be different from any other place in the world. The on-going work there unearths new wonders each year. This site must be preserved!

Destruction of these areas of world-wide scientific importance for a lignite of limited importance to the world's energy needs is unconscionable.

I most sincerely hope that NIRB would recommend to the Minister a 12.4.4.(d) recommendation: "the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned."

Sincerely,

Mary R. Dawson

100115-09EN067-M Lamanna Comments-IA2E

From: Lamanna, Matthew [LamannaM@CarnegieMNH.Org]
Sent: January 15, 2010 11:41 AM
To: info@nirb.ca
Subject: Proposed Mining on Ellesmere Island

Dear Sir or Madam:

Hello and best wishes from the Carnegie Museum of Natural History in Pittsburgh, Pennsylvania. I recently learned of a proposed coal mining exploration project involving the Strathcona Fiord area of Ellesmere Island. As you may be aware, the proposed drilling areas include some of the most important fossil sites in the Arctic. These sites have provided, and, with proper management, will continue to provide, critical insights into the evolution and diversity of Arctic continental biotas in the distant past (specifically, the Eocene and Pliocene epochs of the Cenozoic Era). Such insights are of paramount importance for our understanding of the likely consequences of modern climatic changes. Consequently, I urge protection of these fossil sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.

Thank you very much for your time and consideration.

Sincerely,

Matt Lamanna

--

Matthew C. Lamanna, Ph.D.
Assistant Curator
Section of Vertebrate Paleontology
Carnegie Museum of Natural History
4400 Forbes Avenue
Pittsburgh, PA 15213-4080
Office: (412) 578-2696
Fax: (412) 622-8837
Email: lamannam@carnegiemnh.org
Internet: http://www.carnegiemnh.org/vp/cv/lamanna.htm

100114-09EN067-M Vickaryous Comments-IA2E

From: Matthew Vickaryous [mvickary@uoguelph.ca]
Sent: January 14, 2010 9:55 AM
To: info@nirb.ca
Subject: coal mining exploration

Dear Nunavut Impact Review Board,

I have recently become aware of a proposal to conduct coal mining exploration on Ellesmere Island, Nunavut. As the proposed drilling areas include some of the most important fossil sites in the Arctic, including known Pliocene and Eocene fossil sites in the Strathcona Fiord area, I must request in the strongest terms possible that the proposal be abandoned. The areas under consideration represent a unique global resource that has enormous value for ongoing and long term studies of environmental change. Damage to the proposed drilling areas is quite simply unacceptable. There is a dire risk of eliminating an exclusive window in earth's history at a time when our need to understand climatic variation is greater than ever. Please abandon the proposal to conduct coal mining exploration in the areas of known fossil richness.

Sincerely yours,

Dr. Matt Vickaryous

Assistant Professor

--
Department of Biomedical Sciences
Ontario Veterinary College
University of Guelph
50 Stone Road
Guelph, Ontario
N1G 2W1

tel: (519) 824-4120 ext. 53871
fax: (519) 767-1450

100115-09EN067-M Kohn Comments-IA2E

From: Matthew Kohn [mattkohn@boisestate.edu]
Sent: January 15, 2010 10:00 AM
To: info@nirb.ca
Subject: Westar exploration project in Nunavut

Dear NIRB,

I recently became aware of Westar's coal mining exploration project for Nunavut (Ellesmere Island). I am shocked that this would be considered, as these sites contain some of the most scientifically important fossils *worldwide*. These resources are critical not just to paleontology, but to studies of past climate change and global warming. Any compromise to the integrity to these sites would constitute an irreparable blow not just to scientists, but to the world.

Consequently, I urge protection of these sites, and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.

Sincerely,

Dr. Matthew J. Kohn, Associate Professor
Department of Geosciences
Boise State University
1910 University Dr.; MS1535
Boise, ID 83725-1535
mattkohn@boisestate.edu
phone: (208)-426-2757 fax: (208)-426-4061

100114-09EN067-M Pinsdorf Comments-IA2E

From: Michelle Pinsdorf [drakeducaine@yahoo.com]
Sent: January 14, 2010 10:16 PM
To: info@nirb.ca
Subject: Proposed coal mining on Ellesmere Island

Hello! My name is Michelle Pinsdorf, and I am a geologist and paleontologist by trade. For many years, I have studied and followed the news in mining and exploration for fossil fuels in Canada, and was upset to learn of a proposed coal mining project on Ellesmere Island. This island is one of very few known paleontological sites in the Arctic. Since so much of the land is covered by snow and is rugged terrain, fossil finds are few and far between. I cannot stress enough the scientific value in sites such as the ones on Ellesmere, as they provide not just a scant bone or two, but an entire snapshot of past environments. The bones, the surrounding sediments, and the area's geology are all important clues to completing a larger picture of our changing world. Without even one piece of that puzzle, our understanding is permanently incomplete.

With this said, I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts. Coal is a resource found in many places, but fossils are not. I would hope that the board decides to act for preservation and not exploitation of the land and its resources. Thank you very much for your time and consideration.

Sincerely,
Michelle Pinsdorf

N. Rybczynski, Ph.D.
Canadian Museum of Nature
P.O. Box 3443, STN. D.
Ottawa, Ontario, K1P 6P4
Ph: 613.566.2462
Fax: 613.364.4027
Email: nrybczynski@mus-nature.ca

Jan 15, 2010

Re: Westar coal project proposal

To the members of the Nunavut Impact Review Board,

I very much appreciate the opportunity to write to you concerning the proposed Westar coal project. I am a palaeontologist at the Canadian Museum of Nature who has done 8 years of summer field work in Nunavut. Our projects include work at the Beaver Pond site in Strathcona Fiord (Ellesmere Island), where we are uncovering evidence of a 5 to 3 million year old fossil forest/tundra. The bones of the animals that lived in that environment are also preserved, including mammals such as beavers, black bear and a small deer. We have also worked at the Haughton Crater (Devon Island), where we uncovered the 24-20 million year old "walking seal", *Puijila*. Both projects are on Inuit Owned land, and we are thankful for the support and encouragement of Grise Fiord on these projects. I have not had the opportunity to visit Grise Fiord, but we have provided the Hamlet with updates of our projects, including a small book showing the work we did at Haughton Crater in 2007. In 2008, and 2009 some people from the community visited our camp, and we shared tea, cookies, stories and ideas. In 2009 we presented some of our research to the community of Resolute Bay during the Polar Continental Shelf Program open house. The people we met were very interested in the fossils, and very interested in what these fossils can tell us about the ancient history of Nunavut - its land, plants and animals.

I am writing because I am concerned that the proposed Westar activities could damage or destroy fossil sites that form an important part of Nunavut's history. The Beaver Pond site is one of the sites in the Westar project area. This and other fossil sites in the area provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change. Understanding past climates and ecosystems can help us prepare for the future.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore **I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.**

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

Natalia Rybczynski, Ph.D.
Research Scientist, Palaeobiology, Canadian Museum of Nature
Adjunct Research Professor, Faculty of Science, Carleton University

100115-09EN067-N Kelley Comments-IA2E

From: Neil Kelley [npkelley@ucdavis.edu]
Sent: January 15, 2010 4:27 PM
To: info@nirb.ca
Subject: Comment regarding Ellesmere Island Coal Project

To the Nunavut Impact Review Board:

Ellesmere Island is home to some of the most scientifically important fossils in the world. As a paleontologist, I am deeply concerned about the risks posed to these irreplaceable scientific resources by mining related development proposed by Weststar Resources Corporation.

While I recognize the need to responsibly develop energy resources, such development should not come at the expense of unique scientific or cultural resources. I am particularly concerned that the proposal as posted on the NIRB website (http://ftp.nirb.ca/SCREENINGS/ACTIVE%20SCREENINGS/09EN067-Weststar%20Resources%20Corporation/) apparently makes no mention of plans to mitigate damage to or conserve fossils that may be threatened by exploratory drilling or other mining development activities. In fact it is not clear from the proposal that Weststar Resources Corporation is even aware that their lease areas are in an important known fossiliferous region that has been studied for decades (e.g. Dawson 1990).

I strongly hope that NIRB will recommend to the minister a 12.4.4d recommendation. Weststar Resources Corporation should demonstrate a thorough appreciation for the potential adverse impacts of their activities on scientific resources and present a clear plan to assess and protect these resources.

Sincerely,

Neil Kelley

Reference: Mary Dawson 1990 "Terrestrial Vertebrates from the Tertiary of Canada's Arctic Islands" in Canada's Missing Dimension - Science and History in the Canadian Arctic Islands Volume 1.

--
Neil Kelley
Ph.D. candidate
Department of Geology
University of California, Davis
1 Shields Avenue
Davis, CA 95616

npkelley@ucdavis.edu

100115-09EN067-P Johnston Comments-IA2E

From: Paul Johnston [pajohnston@mtroyal.ca]
Sent: January 15, 2010 1:01 PM
To: info@nirb.ca
Subject: Coal exploration, Bache Peninsula

Dear Sirs:

I understand that Weststar Resoureces Corp. has acquired coal licenses for the Bache Peninsula. This area hosts some of Nunavut's key paleontological treasures. As such, I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

Yours sincerely,

Dr. Paul A. Johnston
Editor, Palaeontographica Canadiana
Dept of Earth Sciences
Mount Royal University
4825 Mount Royal Gate SW
Calgary, Alberta, Canada T3E 6K6
ph (403) 440 6174
FAX (403) 440 6333

100114-09EN067-P Sealey Comments-IA2E

From: ammonoidea@comcast.net
Sent: January 14, 2010 11:54 AM
To: info@nirb.ca
Subject: The Nunavut Land Claim Agreement (NLCA)

The Nunavut Land Claim Agreement (NLCA): I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts.

Thanks,

Paul Sealey

Placitas, NM

100114-09EN067-P Currie Comments-IA2E

From: Philip Currie [philip.currie@ualberta.ca]
Sent: January 13, 2010 6:53 PM
To: info@nirb.ca
Subject: Proposed coal mine exploration
To whom it may concern:

As a palaeontologist who has worked on the Fosheim Peninsula twice in the 1980s, I was very surprised to learn of the proposal for coal exploration. Fundamentally, I have no objection to development of resources as long as it is sensitive to the needs of other parties (in this case scientists). The area is known internationally to be highly significant for its fossils, even though it has not received the intensive exploration of regions in southern Canada. There is absolutely no doubt in my mind that there are many highly significant fossils yet to be found on the Fosheim (not only in the known Pliocene and Eocene beds, but in older rocks as well). I would encourage that the proposal should be reviewed under Part 5 or 6 so that NIRB can identify particular issues or concerns that should be considered in such a review. As long as this is approached correctly, all things can be done and all parties can benefit.

Yours sincerely,

Philip Currie, MSc, PhD, FRSC
Professor and Canada Research Chair
Dinosaur Palaeobiology
CW405, Biological Sciences Building
University of Alberta
Edmonton, Alberta T6G 2E9
CANADA

100114-09EN067-P Antoine Comments-IA2E

From: Pierre-Olivier Antoine [poa@lmtg.obs-mip.fr]
Sent: January 14, 2010 10:23 AM
To: info@nirb.ca
Subject: Coal mining exploration project for Ellesmere Island (Nunavut)

Madam, Sir,

Ellesmere Island hosts among the most important paleontological high-latitude localities at a worldwide scale. These localities are endangered, as may be the surrounding ecosystem.
I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts

Dr. Pierre-Olivier Antoine
Assistant Professor,
University of Toulouse

--
==========
Pierre-Olivier Antoine
Équipe de Géodynamique, LMTG
Université de Toulouse/CNRS/IRD/OMP
14 Avenue Édouard Belin, F-31400 Toulouse (FRANCE)
T/Ph: +33 (0)561 332 598
poa@lmtg.obs-mip.fr - http://www.lmtg.obs-mip.fr/user/poa

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

I am a Geographer who has worked in Ellesmere and throughout the Canadian Arctic. Ellesmere is by far the most scenic place in the Arctic! It also has many valuable geological sites which give us unprecedented records of past environments in northern Canada. In particular the fossil plant and animal remains, and glacial and interglacial records in general.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

René Barendregt
Professor and Associate Dean
University of Lethbridge
44010 University Drive
Lethbridge, Alberta
T1K 3M4
barendregt@uleth.ca
403-329-2530
Website: http://directory.uleth.ca/users/barendregt
or
http://people.uleth.ca/~barendregt/

Richard T. McCrea
Curator of Palaeontology

Peace Region Palaeontology Research Centre
Box 1540
Tumbler Ridge, British Columbia
V0C 2W0
CANADA

Telephone: (250) 242-4051
Fax: (250) 242-4050
E-mail:rtmccrea@prprc.com

January 14, 2010

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project. I have had considerable experience working with industry (especially coal mines) and provincial governments with relation to the protection and preservation of significant palaeontological resources. I hope to impress upon your board the significance of the fossil resources within the Westar coal project areas and help to convince the board that there is an obligation to preserve them as important heritage resources for Nunavut, Canada and the world. The fossil sites that are currently known give us important information about climatic change in the Arctic and how the plants and animals responded to those changes. The Nunavut fossil sites have considerable relevance as they offer a unique comparative perspective in relation to the global concern about current climate trends.

Any industrial activity in areas of proven international palaeontological significance, such as those currently within the proposed Westar coal project areas, can have a catastrophic impact if they are not part of the overall management plan for the industrial activities in question. Generally such provisions are easily accommodated in the early planning stages before the project begins work on the ground. In some of my experiences I have found industry to be quite enthusiastic in helping to preserve such resources. In some cases they have been instrumental in the discovery of new fossil sites and partners in research.

I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I wish your board all the best in their deliberations.

Sincerely,

Richard T. McCrea

100115-09EN067-R Mason Comments-IA2E

From: Robert Mason [bobby.swayback@gmail.com]
Sent: January 16, 2010 9:39 AM
To: info@nirb.ca
Subject: Ellesmere Island

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

This development concerns me deeply. I am a Paleontology student, who has looked forward to one day study the fossil formations found at this site. The notion that it might disappear forever is very troubling to me.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,
Robert F. Mason
bobby.swayback@gmail.com

100115-09EN067-R Hoffman Comments-IA2E

From: Bob Redhawk [saigon785@hotmail.com]
Sent: January 17, 2010 10:33 AM
To: info@nirb.ca
Subject: Coal mining

Dear Sir,

"I urge protection of these sites and recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(d) of the Nunavut Land Claim Agreement, that the project proposal be modified or abandoned due to its potential adverse impacts."

Respectively yours,
Robert Redhawk Hoffman
Paleontologist-SVP

Robin Smith
Department of Geological Sciences
University of Saskatchewan
114 Science Place
Saskatoon, SK S7N 5E2
robin.smith@usask.ca

January 14, 2010

Nunavut Impact Review Board **via email to**: info@nirb.ca

To the members of the Nunavut Impact Review Board:

Re: Weststar Resources Corp. Ellesmere Island Coal Exploration project

I appreciate the opportunity to write to you in regards to the proposed coal exploration on Ellesmere Island by Weststar Resources Corporation. It has recently come to my attention that Weststar has acquired coal exploration licenses on Ellesmere Island, and intends to initiate exploration activities in 2010, subject to the NIRB screening process. For the reasons outlined below, I would hope that NIRB would recommend to the Minister that **as per Article 12.4.4 (b) of the Nunavut Land Claims Agreement (NLCA) the proposal requires review under Part 5 or 6 of Article 12 of the NLCA.**

I am concerned that the significant fossil localities that are documented on Ellesmere Island (and in particular in the Strathcona Fiord and Fosheim Peninsula areas) may be adversely affected by exploration and mining activities. I am a graduate student at the University of Saskatchewan (Department of Geological Sciences, PhD candidate, Paleobotany). In the summer of 2009 I had the opportunity to travel to Ellesmere Island with a paleontological research team from the Canadian Museum of Nature (lead investigator N. Rybczynski). On this expedition we visited the Beaver Pond locality, a Pliocene fossil site located in the Weststar exploration license area, as well as other sites in the Strathcona Fiord and Fosheim Peninsula areas. These sites contain animal and plant fossils that are of international significance, and are part of the natural history legacy of Nunavut. In addition to the intrinsic value of these fossils as records of Earth history and evolution, they also provide information about the climate of Arctic regions at various times in the geological past. This information is being actively used to better understand climate dynamics in Arctic regions in a warmer world, and to test and refine climate models in order to better predict and prepare for climate change impacts.

It is my understanding that concerns have already been raised by the Government of Nunavut Department of Culture, Language, Elders and Youth in regards to the protection of archaeological and paleontological resources in this area. **I strongly share these concerns and hope that the NIRB will recommend to the Minister that the proposal requires review under Part 5 or 6 of Article 12 of the Nunavut Land Claims Agreement.** I would hope that this review would include a full paleontological and archaeological assessment of the area *prior to* any exploration and drilling activities, in

addition to the appropriate consultations with Inuit communities such as Grise Fiord to take into account other critical issues such as traditional land use and ecological concerns.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

Robin Smith
PhD Candidate, Department of Geological Sciences
University of Saskatchewan
robin.smith@usask.ca

cc: Dr. Natalia Rybczynski, Canadian Museum of Nature

100115-09EN067-R Burnham Comments-IA2E

From: Burnham, Robyn [rburnham@umich.edu]
Sent: January 15, 2010 7:04 PM
To: info@nirb.ca
Subject: Westar coal project - URGENT

Importance: High

To the members of the Nunavut Impact Review Board,

I am taking the opportunity to write to you concerning the proposed Westar coal project.

I am a paleobotanist whose majority of interest is in the plants of the Cenozoic, but especially on biodiversity in the past. My position is a professor of Biology and Curator of Paleontology (Paleobotany).

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils speak volumes about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

In light of natural disasters in Haiti this week, we need to evaluate the depth of destruction that we invite by this action of coal mining.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

--
Robyn J. Burnham
Associate Professor of Ecology and Evolutionary Biology &
Curator of Paleontology
Museum of Paleontology
University of Michigan
Ann Arbor, MI 48109-1079

734-647-2585
rburnham@umich.edu

sent to info@nirb.ca

To the members of the Nunavut Impact Review Board,

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

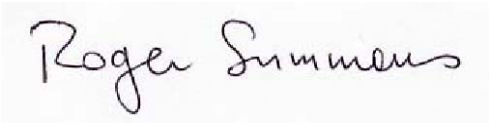
I am a Professor of Geobiology in the Department of Earth, Atmospheric and Planetary Sciences at the Massachusetts Institute of Technology. My research is focused on understanding environmental and biological change in Earth's past so that we may better understand what the future might hold and use sound, evidence-based practices for sustainably managing our environment and our resources for future generations.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(a) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,



January 14th, 2010

100115-09EN067-R Brook Comments-IA2E

From: Ronda Brook [sendbrook@yahoo.ca]
Sent: January 15, 2010 3:07 PM
To: info@nirb.ca
Subject: [SUSPECTED SPAM] Westar Coal exploration submission to NIRB

Importance: Low

To the NIRB:

The purpose of this letter is to explain to the Nunavut Impact Review Board why it must not grant Westar's coal exploration and exploitation requests for the Territory of Nunavut.

In this time of resource depletion, global warming, habitat destruction and violation of Inuit land rights, more coal exploration would be a very big step in the wrong direction. Westar is asking for permission to violate and pollute valuable Inuit habitat for the purpose of extracting temporary profits. This is unacceptable.

The Government of Canada should not be granting licences to corporations to exploit indigenous lands. In the present case, Nunavut's Department of Culture, Language, Elders & Youth (CLEY) has reviewed and rejected Westar's coal license requests for Ellesmere Island. In the interest of the environment and of all Canadians I urge the NIRB not to run ramshod over the jurisdiction and decisions of Nunavut's CLEY for the sake of shortterm profits for a greedy minority.

Sincerely yours,

Ronda J. Brook
Ottawa, ON

To the members of the Nunavut Impact Review Board,

I greatly appreciate the opportunity to write to you concerning the proposed Westar coal project.

I am a vertebrate paleontologist currently teaching paleontology classes in Earth Sciences Department at Carleton University. As a researcher, I also study history of transitions of birds from terrestrial to aquatic environments. I consider fossils recovered in Nunavut, such as *Tiktaalik* and *Puijila* of great importance for both teaching and research efforts of all paleontologists. These fossils are crucial for complete explanation of transitions between aquatic and terrestrial environments in extinct animals. Understanding these transitions and more importantly understanding how the fossils relate to the climates of the past are extremely beneficial for correlating current climate changes and diversity conditions in Nunavut, the whole Arctic, and other similar international areas.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever, therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

Sanja Hinic-Frlog, Ph.D.
Vertebrate Paleontologist
Contract Instructor
Department of Earth Sciences
Carleton University
Email: shinic@earthsci.carleton.ca

100115-09EN067-S Smith Comments-IA2E

From: Selena Y Smith [sysmith@umich.edu]
Sent: January 15, 2010 4:31 PM
To: info@nirb.ca
Subject: Westar coal project on Ellesmere Island

To the members of the Nunavut Impact Review Board:

I appreciate the opportunity to write to you concerning the proposed Westar coal project.

I am currently a research scientist at the University of Michigan (Ann Arbor), originally from Edmonton, Alberta, and my expertise is in the study of fossil plants and past environments.

The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. These fossil sites are part of Nunavut's natural heritage and conserving them for future studies is important, especially since new methods are continuously being developed by the scientific community that allow deeper insights into these past environments and their response to global and local change. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

If the fossil sites in the Westar coal project areas are destroyed the evidence is lost forever. Therefore I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6.

I thank you for your consideration, and request that you keep me informed of the results of this screening process.

Sincerely,

Selena Y. Smith

_____

Dr. Selena Y. Smith
Research Scientist (Museum of Paleontology)
& Lecturer (Program in the Environment)

Museum of Paleontology
University of Michigan
1109 Geddes Road
Ann Arbor, MI 48109-1079
USA

Dept. of Geological Sciences
University of Michigan
2534 CC Little Bldg

1100 North University Ave
Ann Arbor, MI 48109-1005
USA

phone (lab): 734-763-5089
fax: 734-763-4690

Only after the last tree has been cut down
Only after the last river has been poisoned
Only after the last fish has been caught
Only then will you find that money cannot be eaten.
--Cree

100115-09EN067-S Godfrey Comments-IA2E

Dear Nunavut Impact Review Board,From: Godfrey, Stephen J. [GodfreSJ@co.cal.md.us]
Sent: January 15, 2010 7:20 AM
To: info@nirb.ca
Subject: Proposed coal mining exploration project for Ellesmere Island

Dear Nunavut Impact Review Board,

I certainly don’t want to frustrate potential economic development in Nunavut however it has come to my attention that a major coal mining operation might take hold on Ellesmere Island. Apparently, the proposed site includes some scientifically very important fossil localities. Development of these mining operations should only proceed with the close involvement of the paleontological community so as to maximize the number of fossils removed and preserved in museums in perpetuity.

From an expat Canadian.

Sincerely,

Stephen

Stephen J. Godfrey Ph.D.

Curator of Paleontology

Calvert Marine Museum

P.O. Box 97

14150 Solomons Island Road

Solomons, Maryland 20688

Godfresj@co.cal.md.us

410 326-2042 x28

100115-09EN067-S Cumbaa Comments-IA2E

From: Steve Cumbaa [SCUMBAA@mus-nature.ca]
Sent: January 15, 2010 10:28 AM
To: info@nirb.ca
Subject: Ellesmere Island Coal Exploration project proposal NIRB#09EN067

Nunavut Impact Review Board,

I am a vertebrate paleontologist at the Canadian Museum of Nature. I have been fortunate enough to conduct research several times over the last few years in Nunavut, principally on Axel Heiberg, Devon, and Ellesmere islands. I am concerned to read of plans by Weststar Resources Corporation to conduct coal mining in some very sensitive areas of Ellesmere Island in the vicinity of Strathcona and Bay fiords, and on the Bache Peninsula. I have personal experience conducting research on the fossil forests and vertebrate fossils of Eocene and Paleocene age in the vicinity of Strathcona Fiord and Bay Fiord, and I have colleagues that conduct their research on a very fragile peat locality of Pliocene age near the head of Strathcona Fiord. All of these areas are included as areas of interest for mining in documents filed by Weststar.

These fossil localities, which contain unique records of plant and animal life in Nunavut when the environment was much warmer, are fragile and irreplaceable. They are tangible, very visual, three-dimensional records of climate change in the Arctic. As an example, I have photos I took of a fossil forest overlooking Strathcona Fiord in the Weststar claim area. One of the tree stumps visible on the surface is more that two meters in diameter; as a living tree it would have exceeded 30+ m (100 ft) in height. It is only one of dozens of stumps in an area where the tallest living “tree” is the Arctic willow, just a few centimeters high. I am very concerned that these fossil localities could be destroyed – lost forever as part of the heritage of Nunavut, Canada, and the world (yes, they are of international scientific importance). I have not personally worked on fossil localities on the Bache Peninsula, but am aware that both archaeological and paleontological localities exist there, and require further investigation.

I recommend that the Nunavut Impact Review Board advise the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the project proposal requires review under Part 5 or 6. As I understand it, this recommendation does not prevent economic development in the areas of concern, but would allow a careful assessment of potential impact in specific areas. I would be happy to provide additional information to the Board or to the Minister. Thank you for the opportunity to comment on this proposal.

Sincerely yours,

Steve Cumbaa

Stephen L. Cumbaa, Ph.D.

Research Scientist / Chercheur scientifique

Earth Sciences / Sciences de la terre

Canadian Museum of Nature / Musée canadien de la nature

P.O. Box 3443 Station "D" / C.P. 3443 Succursale «D»

Ottawa, ON K1P 6P4

CANADA

T: 613-364-4049 / F: 613-364-4027

E/C: scumbaa@mus-nature.ca

Livraison de colis / Courier /Shipping:

Musée canadien de la nature / Canadian Museum of Nature

Edifice du patrimoine naturel / Natural Heritage Building

1740 Chemin Pink / 1740 Pink Road

Gatineau (Aylmer) QC   J9J 3N7

CANADA

Adjunct Research Professor, Earth Sciences

Carleton University

100114-09EN067-T G Rybczynski Comments-IA2E

From: Tony Ryb [tonyryb@rogers.com]
Sent: January 14, 2010 12:19 PM
To: info@nirb.ca
Subject: Proposed Westar Coal Mining Exploration in Strathcona Fiord

To: Nunavut Impact Review Board (NIRB)

Jan 14 2010

Subject: Proposed Westar Coal Mining Exploration in Strathcona Fiord

Ellesmere Island has yielded a fossil record of tremendous international scientific significance. These fossils offer unique evidence for investigating evolutionary change, biodiversity, and the impacts of climate change on polar flora and fauna. Arctic fossils show us how the Earth, and especially the Arctic, has responded to changes in greenhouse gas concentrations. The Artic is among the best places in the world to assess and predict the impacts of global warming.

Some of the most valuable known Pliocene and Eocene fossil-sites in the Arctic are concentrated in the Westar claim areas, particularly Strathcona Fiord.

The NIRB should recommend to the Minister that the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

It is very important to preserve these world-class fossil sites that can provide internationally important scientific information to better understand global warming.

Sincerely yours, from two very concerned citizens,

Tony Rybczynski

Galina Rybczynski

26 Northpark Dr

Ottawa

ON K1B 3Y6

Canada

Tel 613-837-7367

100115-09EN067-V Ward Comments-IA2E

From: angellis [angellis@tds.net]
Sent: January 15, 2010 10:54 AM
To: info@nirb.ca
Subject: NLCA part 5 or 6

Hello,

I would like to write and express concern for the areas that will be mined. It is my understanding that these regions hold large amounts of fossils. The prehistoric remains are wonderful relics of the worlds past and it would be a shame to have them destroyed. It is my hope that both sides can look at possible options that would benefit both the coal company and the fossil loving public, without sacrificing Canada's fossil heritage.

Thank you for your time

Vince Ward
angellis@tds.net

To the members of the Nunavut Impact Review Board,

I have been notified of a proposed coal mining exploration project for Ellesmere Island (Nunavut) that is currently under review. The proposed drilling areas threaten some of the most important fossil sites in the Arctic, including known Pliocene and Eocene fossil sites in the Strathcona Fiord area. These palaeontological sites are invaluable and irreplaceable and should be protected. The proposed activities could damage or destroy fossil sites that form an important part of Nunavut's history. These fossils tell us about the history of Arctic plants and animals, and are recognized internationally for their scientific importance. They also provide important evidence from a time when Earth, especially the Arctic, was warmer. Ultimately, evidence from Nunavut's fossil record can help us better estimate and prepare for future climate change.

Of particular concern is a site located at Strathcona Fiord, named the "Beaver Pond Site". No other site such as this is known in the world. Fossils recovered from this site have contributed an immeasurable amount of knowledge regarding what we know about high latitude flora and fauna from 6-3 million years ago in Canada. I visited this site in the summer of 2008 with Dr. Natalia Rybczynski (Canadian Museum of Nature). There we collected material used in my undergraduate thesis. I am currently enrolled in a M.Sc. at Carleton University. The goal of my thesis is to determine if this site represents a fossilized beaver-made pond. Based on the presence of beaver cut wood and fossils of a small Arctic beaver, it has been suggested that this site was a beaver pond. However, the hypothesis has not been fully tested. If it does, then this would provide the earliest evidence of dam building behavior (Early Pliocene: 6-3 Million years old) by beaver. Such a finding would be significant because it would be the first evidence of dam building by a lineage outside modern beavers and would suggest that dam building arose at least 24 million years ago, in the common ancestor of the modern and Arctic fossil beaver. This summer, I will be revisiting the "Beaver Pond Site" in order to collect samples for my project, perform a detailed stratigraphy and prospect for new sites.

I would like the Nunavut Impact Review Board to recommend to the Minister, pursuant to article 12.4.4(b) of the Nunavut Land Claim Agreement, that the Weststar Resources corp. coal exploration project proposal be reviewed under Part 5 or 6.

On the Screening part 2 form submitted by Weststar Resources Corp., under the Project General Information heading:

6. Discuss alternatives to the project and alternatives to project components, including the no-go alternative. Provide justification for the chosen option(s).

They state:

"…Any archaeological sites that are discovered will be left undisturbed; their location will be recorded and submitted to the GN and the QIA."

Weststar Resources Corp. clearly acknowledges the importance of sites that contain archaeological artifacts. Palaeontological sites are no less important and should be treated with equal respect. The new proposal could include a clause outlining protection of known palaeontological sites and their surrounding area. It should also include a clause that would protect new palaeontological sites found by the company during their exploration for coal.

I appreciate the opportunity to write to you concerning the proposed Weststar coal project.
Sincerely,

W. Travis Mitchell
M.Sc. Candidate
Carleton University

100115-09EN067-W Sawtell Comments-IA2E

From: Wayne Sawtell [elperroloco@gmail.com]
Sent: January 15, 2010 7:38 AM
To: info@nirb.ca
Subject: NIRB - Westar mining proposal on Ellesmere Island, Nunavut

To: Nunavut Impact Review Board

Dear members of the board,

I recently learned about the extensive coal mining operations that Westar plans to undertake on Ellesmere Island in the summer of 2010. I would like to make you aware of the extremely high scientific significance of the Pliocene fossil deposits that have been discovered on Ellesmere beginning in 1961. Specifically, the exact areas where Westar is planning on mining, the Fosheim Peninsula and Strathcona Fiord are the locations with the most important fossil deposits. Scientists from the Geological Survey of Canada and the Canadian Museum of Nature have made groundbreaking discoveries in these areas that have revealed the presence of extensive tropical forests in the area millions of years ago. In these conditions, a vast array of wildlife existed on the Ellesmere land mass different from the present flora and fauna, and species may have even evolved there, notably the seal family. Not only is the evidence from sites in these areas crucial to understand these new and astounding revelations about the evolutionary history, but it can give important insights into past climate change trends that could help us understand current global change.

Furthermore, the natural heritage of Ellesmere Island is an important part of the indigenous people’s heritage in the Arctic. The territorial government of Nunavut’s Department of Culture, Language, Elders and Youth has reviewed the considerations around the granting of coal mining licences for Ellesmere Island and has recommended that no licences be granted for areas with known fossil deposits, which would include Fosheim Peninsula and Strathcona Fiord. This is obviously a sensitive part of the Inuit culture of the area and their perspectives and judgments should not be ignored.

Therefore, I strongly urge the board that when it receives and screens the above project proposal it should indicate to the federal Minister in writing that under section 12.4.4 of the Act the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

Thank you for considering the actions that I and many other concerned Canadians will support.

Yours truly,

Wayne Sawtell

M.Sc. candidate in Biology, University of Ottawa