Trade Book Evaluation

The book we chose is titled, <u>Bodies from the Ice: Melting Glaciers and the Recovery of</u> <u>the Past</u> by James M. Deem. It was one of the National Science Teachers Association's 2009 winners for Outstanding Science Trade books for students K-12. <u>Bodies from the Ice: Melting</u> <u>Glaciers and the Recovery of the Past</u> was published in 2008 under Houghton Mifflin Company and includes photographs taken throughout history by various people and photographers.

Bodies from the Ice: Melting Glaciers and the Recovery of the Past describes many different details of how glaciers can tell stories of the past based on bodies and other artifacts found in the melting ice. To draw readers into the science of glaciers, the author starts with the discovery of an important corpse found on the Niederjoch Glacier. Deem details the investigation of the body and the artifacts that were found nearby. The remains were scientifically tested and found to be from 5,300 years ago. This discovery provided important information about our past. The book follows the discoveries of many more bodies that were found in glaciers and the new information that these discoveries unveiled. Deem explains how glaciers preserve the artifacts that are left in them giving us a more detailed account of what really happened in history. Throughout the book, information is presented about the history and importance of glaciers and the items found in them, as well as the issue of global warming and how this dilemma will affect the way we gain information about our past.

When comparing <u>Bodies from the Ice: Melting Glaciers and the Recovery of the Past</u> to the NSTA criteria, we felt that all six of the main points were met. This book has a large amount of science content, which is one of the standards for the NSTA award. There are multiple science techniques that are explained as well as information about glaciers and the artifacts that were found in the melting ice. The book goes into detail about the major steps that are needed to complete an investigation by describing what went wrong in the case of the first body found in the glacier. By indicating the mistakes that were made, the reader is engaged in the science content that is being presented. This is a good example of the scientific process and the steps that need to be taken to solve the problem at hand. The book also explains how glaciers are moving and the major properties that they possess making the content matter easier to comprehend with all of the information that it contains.

Since the book was published in 2008, the information presented is up to date and accurate. Science is always changing but the procedures used were current for the time frame of the book and for when the investigations took place. The investigative techniques and methods are clearly explained and examined throughout the book and are still used today in some cases. Since the artifacts and evidence that were collected are older and more fragile, special measures had to be taken to preserve the contents. The book also has a good mixture of history included in the science of these glaciers and what is found in them. This information is very clearly explained and easy to follow.

In his book, Deem clearly distinguishes the theories from the facts and is sure to carefully explain each. For example, at the beginning of the book, the body from the Niederjoch Glacier was thought to be a fairly recent addition, but that theory changed and it was then believed to date back to the 1800's. Then, once again, it was scientifically proven to be even older than that. The book clearly separated these statements as either theory or fact. Throughout this Trade book,

the information that is presented is clear and concise while still informative about the subject at hand.

In <u>Bodies from the Ice: Melting Glaciers and the Recovery of the Past</u>, facts are not oversimplified to the point that the information is misleading. This is another important aspect for the NSTA in determining whether or not the book is award worthy. An example of this is when Deem described The Iceman's Ax. He explains the dimensions and what it would have been made of; explaining that the handle came off of a Yew tree and a copper blade was attached to the end with two pieces of leather binding. Deem then explains how it compares to the present shape of an ax and that while it would be less efficient than present day axes, one could still chop down an entire tree in forty-five minutes. This example shows how Deem explained the similarities and differences of an ax back then to an ax now.

Another important trait about the book is that Deem supports his generalizations with facts and thereby does not omit any significant facts. The following passage serves as an example: "As glaciers disappear, greater problems await. Because they provide the largest share of the Earth's fresh drinking water, glaciers that thaw completely can no longer feed rivers or streams. As a result, serious long-term droughts are likely to occur." Then a picture of a river at the base on a mountain is shown with the caption reading, "This rushing stream in northwest Pakistan is fed by Himalayan glaciers. If they disappear as predicted in forty to fifty years, the main source of water for Pakistan will be gone, causing severe water shortages." Instead of simply making his generalization, "As glaciers disappear, greater problems will await." And leaving it at that, Deem continues on, explaining what he means and supporting his statement with facts.

The final characteristic the NSTA looks for when judging how good a particular book is, is checking to see if it is free of gender, ethnic, and socioeconomic bias. We believe that <u>Bodies</u> from the Ice: Melting Glaciers and the Recovery of the Past is unbiased in each of these categories. The book is appealing to males and females as well as any ethnicity. It is neat that the book discusses findings from all over the world, everywhere from Italy, Canada, Pakistan, Switzerland and the United States. The book does not seem to be socioeconomic bias either, it is a book on history and the discoveries of people and their items discovered from long ago and therefore doesn't mention items that only those in the upper or lower socioeconomic brackets would have knowledge of.

When calculating the reading level of <u>Bodies from the Ice: Melting Glaciers and the</u> <u>Recovery of the Past</u> using the Fry readability formula, we were surprised to find that our book rated off the chart. We had an average of five sentences in our three randomly chosen passages, which according to the Fry readability graph, is perfect for grades six and up. However, our average syllable count was unexpectedly high. We found that the average number of syllables in our three passages was 181. The Fry readability chart only goes up 174 syllables with a grade fifteen reading level. We therefore, were left to estimate how the graph would extend and we decided that according the Fry readability formula <u>Bodies from the Ice: Melting Glaciers and the</u> <u>Recovery of the Past</u> would be at a grade twenty reading level. This source clearly exaggerates the reading level and does not match with the reading level for students of grades six through twelve assigned by the NSTA. According to these results, we feel that the Fry readability formula should not be heavily relied upon for every book. There are probably many books that the Fry readability formula classifies the readability level rather well, however in our case, <u>Bodies from the Ice: Melting Glaciers and the Recovery of the Past</u> is nowhere near a grade twenty reading level, if that even exists. The award panel who judged <u>Bodies from the Ice:</u> <u>Melting Glaciers and the Recovery of the Past</u> felt that the book's reading level fell under intermediate to advanced, grades six through twelve. After reading the book ourselves, we agree more with the NSTA's designation of the reading level. While there are some larger, more scientific words found in the book, younger, intermediate readers would still be able to bypass these words and still have an understanding of what is being said. We feel that the book is very interesting and is filled with many colorful pictures to compliment the text and keep a reader of any level engaged. We feel that this book would be a valuable asset to any classroom and provide students of many ages with accurate and intriguing information.