Historical Exploration of Bison Genetics

Introduce your students to the historical context and causes of the modern-day plight of the American Bison (Bos bison) through an exploration of primary sources. Presenting your students with Document Based Questions (DBQs) and our Bison Primary Source set can help them discover the history of bison in North America. Students can engage in critical thinking and supporting ideas and arguments from evidence in this lesson.

Objectives:

- To explore the historical basis for the modern-day reduced genetic diversity in American bison populations.
- To gain facility with using primary source materials.

Materials:

- Document Based Question Worksheet
- Bison Primary Source Set*
  Note: most materials are sourced from larger collections that are available online.

Process:

1) In this project, students will be presented with historical documents from the WCS Archives and other sources and a Document Based Questions (DBQ) Worksheet.
2) The class should view the WCS Bison History video to hear WCS staff discuss WCS’s historical role in the preservation of the American bison. This will provide real world context and understanding to help students develop answers to the DBQs.
3) Teachers should review the Glossary and the DBQs with their students.
4) Teacher can elect to place students in small groups or have students work independently to complete the DBQ Worksheet.
5) Teacher should show the following webpage for Volume 2 of the Wildlife Conservation Scrapbooks of William T. Hornaday and explain that the document set they will be using contains documents and excerpts selected from this volume. The teacher should advise students that Hornaday compiled these scrapbooks between 1906 and 1911. Teacher should also let students know that two other sources were used to create the document set, Hornaday’s 1913 Book, Our Vanishing Wildlife, and Hornaday’s 1899 Book, The Extermination of the American Bison.
6) Distribute paper or digital copies of Bison Primary Source set to students/groups.
7) Time should be given to complete the DBQ Worksheet and to have a full class discussion of the results of the student’s document based research. In that discussion a focus on questions 8 through 10 can be used to connect this project and discussion to the next Field Sight Bison Genetics project, Bison Pedigree Charts and Mean Kinship Values.

*Please be aware that some of the historical documents contain insensitive language that may be seen as offensive or triggering. You may need to talk with your students about historical context and understanding before completing this lesson. These documents do not reflect WCS or its values.

Supplemental Resources:
There are numerous online resources to help you use primary sources in your classroom. Try searching for terms including: document based questions and primary sources.

a. National Geographic’s Human Journey Blog
   1) The Bison: A National Symbol for All Americans
   2) Celebrating the Historic Ties of Native Americans to the Bison

b. The Role of Women in Funding the Montana National Bison Herd, through the ABS