Text Set: Endangered Species for 10th Grade Biology Students

The idea of this text set is to get students interested in endangered species. The expectations of the text set is to explain how the effects of humans have impacted many different habitats on Earth and how this impact has affected different species including animals and plants, which are now becoming endangered. The text set will be used to supplement and enhance the adopted textbook.

There is not a specific Virginia Standard of Learning (SOLs) for endangered species; however, the text set can be used to relate to other biology SOL topics including:

BIO.7: The student will investigate and understand bases for modern classification systems
   a) Structural similarities among organisms

BIO.8: The student will investigate and understand how populations change through time
   b) How genetic variation, reproductive strategies, and environmental pressures impact the survival of populations
   c) How natural selection leads to adaptations
   d) Emergence of new species

BIO.9: The student will investigate and understand dynamic equilibria within populations, communities and ecosystems
   a) Interactions within and among populations including carrying capacities, limiting factors, and growth curves
   c) Succession patterns in ecosystems
   d) The effects of natural events and human activities on ecosystems

The target audience for this text set is for tenth grade biology students below, at, or above reading level. Overall I would like this text set to show the students how they impact the world around them, and what they can do to help make our planet a better place. I would also like to use this text set to get students to think more critically about endangered species and what they can do or what can be done to help these species.


This book is an overview of a selected set of animals and plants that are close to becoming extinct. The book also provides a wide range of information about the different selected species. The author of this book also explains how people can
become involved in helping the endangered species mentioned. This book would be a great way to get students interested in different species because it provides the basic information which could get the students to go and do more research on their own for an assignment or even for their own personal knowledge.

The Flesch-Kincaid readability rates this book at a grade level of 12; however, I think that is a little high for this book. The sentences are a little long which may have increased the readability; however, the Bader analysis would show that the readability would be a little lower because the concepts are really simple and the book is organized and framed well. The book offers many pictures and little factoids that can help the reader to better understand the information.

This book could be used in class as the introduction to the unit or a project. My intent for this book would be to have the students look through the book in class to get basic information about endangered species. I would have the students look through the book in class in case there are any problems so that I can clear up any issues that students may have. If the student feels comfortable with the information in the book they could also take the book home and use it independently. I could also administer a cloze to see if the book is a good match for the interested student. Another idea would be to use this book as a read aloud and cover a different endangered species every class. I believe doing so would get the students interested without overloading them with a lot of information all at once.

This book gets the most reluctant readers interested because it uses interesting facts to grab the attention of the reader. I also think because this book offers ways for the readers to get involved or to make a difference to help the endangered species that it will entice readers because it offers possible solutions.

_The Wild Trees_.

This book is a true story about the adventures of a few botanists who explored redwood tree canopies and other forest canopies, which are largely unexplored. This novel offers great insight into the largely unexplored world of plants through the botanists adventures in the different canopies. The adventure offered by this novel is a great way to get students interested in plants.

The Flesch-Kincaid readability rates this book at a grade level of 16; however, I think that is about right for this book. The novel is very lengthy and has a lot of words
that could be unfamiliar to high school students. The novel only offers a few pictures, which are not enough to help a struggling reader understand the book any better. Also because of the print is small, the book does not have an appealing appearance that would entice struggling readers. This book would be ideal as a read aloud in class because the adventure it offers is enough to entice any student or reluctant reader. The read aloud could be done first before the unit begins and continued throughout the class. I believe, the adventures offered by the botanists in the novel are enough to interest students to want to learn more about rare or other endangered species of plants.

**Rare Breed. Smithsonian**

This article is about the issues that have been facing cheetahs. The article first starts off introducing Laurie Marker, the foremost expert on cheetahs. The author explains what the problems are and how Marker has single handedly stabilized the cheetah population.

The Flesch-Kincaid readability rates this article at a grade level of 11, which seems appropriate for this article. The article offers a lot of pictures, but some terms might be unfamiliar to some students. This article could be offered to be read in class to supplement what has been learned. If the student feels comfortable with the article it could also be taken home to be read. This article could be use independently by students at or above the grade reading level, to supplement the material learned in class or for those students who are really interested in want to learn more about cheetahs. For students below reading level, who are interested I would offer them the article to read in class so they could ask for any clarification if necessary.

This article can get even reluctant readers interested because it illustrates a real problem in the world, and that something can be done to fix the problem. But, what makes the article even more interesting is that it interviews someone, Marker, who is and has done something to remedy the problem and that anyone passionate enough about a topic can find a solution if they try. I think that the article will be able to show students that it is not a hopeless cause if an animal becomes endangered.

**Tracking the Bighorns. Smithsonian**

This article explains the problems facing bighorn sheep and what researchers are doing to learn more about them. The article explains the techniques used to do the research and how the research will help them learn more about the declining
The population of sheep. The article also goes on to explain the problems facing the sheep and why the population is declining.

The Flesch-Kincaid readability rates this article at a grade level of 4; however, I think that it is a little low. The article offers a few concepts dealing with research and experiments that may be new to some of the students, but other than that the article has a lot of pictures and is written very well.

This article would be great for students to use independently in class or out of class. It offers another example of work that is being done to help another endangered animal, which exemplifies that endangered species are not a hopeless cause and would interest even the most reluctant reader. Another great aspect of this article is it talks about how research is done, which could also be an aspect of the article that could get students interested. This could be because some students might be interested in how the information is gathered when the research is done, which could be a possible career choice for some students who want to find their own ways to help endangered species.

**Learning to Be an Orangutan. *Science Illustrated***

This article explains the problems that are faced by orangutans in Asia. The author explains that orangutans are taken as pets and then when rescued rehabilitated to live in the wild. This is a great article to show how humans negatively and positively impact the lives of animals. The article also extensively explains how humans prepare rescued orangutans to return to the wild.

The Flesch-Kincaid readability rates this article at a grade level of 14, which seems a little high. The article offers a lot of pictures, but has a lot of names of foreign countries where the rescue operation has been taking place. I think these unfamiliar names could have obscured the readability of the article. Other than that the article is very well written and also organized very well. The overall appearance of this article would also grab the attention of the readers, because it has a lot of bright colors that are very attractive to the eyes. I would offer this article in class for the students in case they have any problems with the article. If I use this article in class I could also use a KWL activity to help the students build schema.

This article would be a great way to finish the unit because it offers a positive end to a somewhat sad unit. The article offers hope because it illustrates the work being
done to help endangered animals. The article could also be used to supplement a possible project in class on endangered species and what has been done to help the population from depleting even more than it already has.

**Penguins on Thin Ice. Science Illustrated**

This article explains why penguins are becoming endangered and how humans have negatively and positively impacted the life of the penguins. The article also takes a look at the past and the possible future of penguins due to conservation groups. The article also covers what has been done to help protect penguins.

The Flesch-Kincaid readability rates this article at a grade level of 11, which seems appropriate for this article. The article offers a lot of pictures, but also includes a lot of scientific names which could possibly hinder readers at a lower reading level. Other than the use of the scientific names the article was very well written, which will help the students at or above reading level be able to read this article independently. I would offer the article to be read in class or at home depending on the reading level of the student.

However, the article also offers a few interesting factoids about penguins that could even get the most reluctant reader interested. The article also illustrates all of the species of penguins and gives information about each and the classification of each whether endangered, vulnerable or of least concern.

**Black Market: Inside the Endangered Species Trade in Asia**

This book is a great example of how humans have impacted endangered species. The book examines how and why different endangered animals are so highly sought after. What is also really great about this book is that it is about real situations and real people. The author is able to empathetically bring to light the exploitation these endangered animals have to face.

The Flesch-Kincaid readability rates this book at a grade level of 12, which seems appropriate for this book; however I would still caution on using this book in school. The book offers some very graphic pictures, which could be a little too mature for some students. If the book is used, I would suggest its use in class, so the students can ask any questions about the reading material or the pictures. The book is very well written, which I think could help a struggling reader understand the information; however, I would still have students use this book in class because of possible questions with the
material because it is so provocative. I would also suggest that the book be used in class because it could be at the frustration level for some of the students.

I think this book would be a great addition because it explains the real side of the black market especially for these highly sought after endangered animals. I think because the author examines the harsh reality of this exploitation and couples it with information about what is being done to try to bring this exploitation to an end, it is enough to get any reader interested. I think this book would be a great way to get students thinking about how important this issue really is. This book could also be used in an in class discussion to talk about animal rights.

**The Man Who Planted Trees.**

This book is a true story about a man who spent over thirty years of his life planting trees. Due to his efforts a whole forest grew and lead to a natural chain of events that brought back life to the area. The book could be used to empower students to come up with their own ideas to make a difference in the world.

The Flesch-Kincaid readability rates this book at a grade level of 5, which is appropriate for this book. This book offers big print and a lot of pictures and is also written in a familiar, easy to understand format. The book could be used at home independently by all students to show them that anyone can make a difference if they are not happy with their environment. I think this book would be a great addition to an end of the unit project to help get students interested in thinking about ways to make improvements or help the environment, which would allow them to apply the knowledge that they have learned. I think that using this book at the end of the unit would also leave the students with hope that the world could be made better.

**Wildlife Alert! The Struggle to Survive.**

This book is a great source for information about why animals are becoming endangered. The book then offers examples of animals in all regions that are becoming endangered and then what can be done to save some of the animals. The book also explains how different nations are working together to try to protect endangered animals.

The Flesch-Kincaid readability rates this book at a grade level of 6, which is appropriate for this book. This book has a lot of pictures that aid in the comprehension of the text in the book. The book also offers a lot of captions for the pictures provided, which also aids in the comprehension of the material. The book also does not have
more than a couple paragraphs on each page, which is helpful because it will not overwhelm a struggling reader.

This book could be used out of class independently to supplement information learned in class. This book would be ideal to inform the readers about what causes affect the animals and why it is leading them to endangerment. I think this book could also be used as a starting point for a project at the end of the unit. I think that this book will get any student interested because of the pictures it offers the readers. I also think that the explanation of the causes is a great way to get students to start thinking critically about how they can make changes to help animals and plants.


This book goes into detail about problems that are faced by ecosystems, animals, and plants. The book also explains about evolution and extinction, which helps in the understanding of why it is so important when animals, plants or ecosystems become endangered. This book also offers explanations about different conservation activities that are being done to help.

The Flesch-Kincaid readability rates this book at a grade level of 5, which is appropriate for this book. The book offers a lot of pictures that assist in the understanding of the written information. This book could be used at home independently to help further the student’s information and supplement what has been learned in class. This book also offers a lot of factoids which could be used to get students interested in the book.

I think that this book could be used in combination with other texts to help the students to complete a project at the end of the unit. This book could also be used to introduce the material by explaining why animals, plants and ecosystems are becoming extinct. What is really great about this book is that it offers the students information about endangered ecosystems.


This book correlates different regions of the world with endangered animals, plants and ecosystems. What really makes this book special is that it comes equipped with a map of the different areas mentioned and shows where the endangered species can be found. Also the descriptions of the different endangered species provides a lot of information about why the species are now endangered.
The Flesch-Kincaid readability rates this book at a grade level of 9, which is a little high for this book. The book offers a lot of pictures for the students and also provides a map to locate the different species. However, I think that use of the map could add some difficulty to the material if the student does not understand how to use a map or its other features. Other than that the book is written and organized very well, which could help a struggling reader. I think that this book could be used in class or at home to supplement what has already been learned. The only problem that I think might occur would be issues with the maps, and in that case the teacher could help in class that same day or the next day. This book could also be used to help the students get their parents involved if possible.

I think this book could even get the most reluctant reader interested because it examines all aspects of endangered species. This book shows that even the United States has endangered species, which can help bring home the idea that this problem is everywhere. I think because this book illustrates this point very well that it is capable of getting any reader interested in the material. I think this book would be a great way to introduce the students to the benefits of animals and plants as well as to get them to start thinking critically about what could be done to help endangered species.

*Saving Species [DVD series episode]. In Planet Earth*

This particular episode would be a great culminating activity because it includes experts answering questions about what can be done to help endangered ecosystems, animals and plants. I think that this episode also asks some other moral questions that could get the students to think critically after everything they have learned about endangered species. I think that this episode will also answer questions that the students might have had, but also raises more questions for the students to think about. I think after watching this episode the class could have a great discussion, so that the students can express their own ideas and also see what other students think. I would also hope that this could get students interested in wanting to learn more about our environment and the human impact. I would also have to say that overall the whole Planet Earth series could be used throughout this unit because each episode shows a different region of the world and shows the life of endangered species in that region and the problems they are facing. I think because the Planet Earth series shows all different types of ecosystems that it will get every student interested because it offers
such a variety. I think because such variety is offered that students will find something that they will particularly enjoy.

**Other Great Sources:**
I did not have the opportunity to fully review these sources, but they could all be incorporated into a lesson on endangered species.


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**Text Set Bibliography**

*International.*


