

A Visit with Wolves: Exploring Isle Royale through Literature Circles & Blogging

Sarah Storm – Middle School Science

A. Goal Statement: Students will address their misconceptions about wolves through literature. Through their respective stories, they will gain a thorough understanding of the behavior and habitat of wolves as well as the public policy and regulation that are responsible for their continued survival. As members of literature circles, students will have opportunities to use reading, writing, and oral language to “address questions about science content and build their capacity to engage in scientific reasoning.”

In the December 2006/January 2007 issue of *Educational Leadership*, Susanna Hapgood and Annemarie Sullivan Palincsar suggest that reading can be an important part of the [science] inquiry process. In their article entitled, “Where Literacy and Science Intersect” Hapgood and Palincsar state the following: “Inquiry-based science, as we define it, involves students in using the tools of science to answer questions about real-world phenomena. This type of inquiry is a collective effort in which students compare their thinking with others’ thinking, actively communicate with one another, and express their ideas through words and graphics. Inquiry science and literacy intersect when students use reading, writing, and oral language to address questions about science content, and to build their capacity to engage in scientific reasoning.” (p.56)

B. Objectives

Students will draw connections between Yellowstone National Park and Isle Royale National Park and gain an understanding of wolves by reading one of the following three books: *Wolf Stalker* by Gloria Skurzynski and Alane Ferguson, *Never Cry Wolf* by Farley Mowat, and *Shadow Mountain* by Renee Askins. Students will also explore topics of interest, that relate to Earth Science and which are touched on in the books.

C. Application Details

This Unit is intended for 8th grade Earth Science students. The entire unit will take approximately 3 weeks to implement and requires a little extra preplanning if blogging is a new concept for the teacher (as it was for me)! Students will read their books in Literature Circles (Lit Circles) which are groups of 4 or 5 students who read and discuss the same book together. Because my students will be reading three different books, I will have three different Lit-Circles per hour. In order to allow discussion between students of different hours, I created a Blog Page to act as a central discussion location. [Educators can sign up for a free blog page at www.edublogs.org.] My personal Blog page can be accessed at <http://storms.edublogs.org>. The Blog Spot includes a brief overview of the Lit-Circle project and a page for student discussion of each book. Because I am going to be guiding the discussion by posting questions and comments as we progress through the books, there isn’t a whole lot to see on my blog spot right now other than the initial setup and structure. I would, however, encourage you to quickly visit my site so you can see how it’s set up. Feel free post a message! (Click on “Hello World”)

Materials List

Classroom copies of the three books: *Shadow Mountain*, *Never Cry Wolf*, and *Wolf Stalker*

* I am only purchasing enough copies to use IN the classroom. I will give parents the option of purchasing a book for their child to own and keep with them (take home at night, etc). It would be too costly for me to purchase one book per student as I have over one hundred students.

Additional online resources about Isle Royale and Yellowstone National Park

D. Content Background

In 1996, when the National Council of Teachers of English and the International Reading Association Issued the national Standards for the English Language Arts, literature circles were explicitly identified as one of the “best classroom practices” in the teaching of reading and writing. Literature Circles are

small groups of students discussing quality literature. In my case, my students' reading, writing, and communication skills will be strengthened through **science** literature. After reading set portions of their book, students will meet the following class period to discuss what they've read and address any questions they might have for one another. In doing so, students will employ skills of social interaction while thinking and using knowledge that they already have. Discussion will also challenge student thinking, encourage them to consider other points of view, and provide opportunities to express their opinions clearly, and draw conclusions. Finally, discussion will allow students to problem solve independently, while providing opportunities to speculate, hypothesize, question, explain, persuade, compare and evaluate with other members of their group. Students will be allowed to decide how many pages they should read each reading day to prepare for their next discussion, and the novel will need to be completed by an agreed-upon due date. Once the novels are finished, we will revisit what we learned in our books as we progress through our Earth Science curriculum.

In choosing the books for this unit, considerations were made for the varied student reading levels that most teachers can reasonably expect to deal with. *Wolf Stalker* is a fictitious story set in Yellowstone National Park. It is intended for students age 8 – 12 and will be used for students who are reading below grade level. I purchased this book on Isle Royale and chose to use it because it makes many references to places and things that are of significance to our Earth Science curriculum, including: Old Faithful, the Mammoth Hot Springs, the Yellowstone Fires of 1988, the effect of cloud cover on temperature, and the behavior and public perception of wolves. *Never Cry Wolf* is the book I drew from while on Isle Royale, and it is about a scientist who is sent to investigate whether or not wolves are killing arctic caribou. The book is aimed at an older audience, and is appropriate for students who read at grade level and maybe even a little above grade level. *Shadow Mountain* is written by Renee Askins, a naturalist educated at Kalamazoo College, who founded the Wolf Fund to help restore wolves to Yellowstone National Park. I also purchased this book on Isle Royale, and I found it interesting for a number of reasons. I like that the author is a woman scientist, since we always address misconceptions and stereotypes about scientists at the beginning of every school year; I also like that it gives insight to the public debate over the reintroduction and protection of wolves. As a supplement to the books, we will also examine the Draft of Michigan's "Wolf Management Plan", which is available online at www.michigan.gov/dnr.

E. Methods and Procedure

Prior to the Lit-Circles, I will have several days of introduction, where I will attempt to arouse my students' curiosity about wolves.

Day One: The Science of Observation

At the beginning of every year, I discuss the importance of making quality **observations** with my students. We discuss the skills that scientist must possess to "do science" and I encourage my students to become more observant in their everyday lives. In the three books chosen for our Lit-circles, the characters rely on their observations to draw conclusions about their surroundings.

Procedure: In groups, students will read a story from the Isle Royale Wolf/Moose Annual Report, which can be found online (on page 14 of the document) at:

http://www.isleroyalewolf.org/ann_rep/ISRO_annrep06-07.pdf . As they read, they should take notes on conclusions she came to as a result of observation. Students will list what the observation was that led to the conclusion, and then we will discuss them as a group.

"A Small Save Haven" was written by Leah Vecutich and details her encounter with a Moose in the early morning hours on Isle Royale.

June 5, 2006—I was awakened to the sound of moose grunts outside the yurt, at Windigo, where we live. My alarm had not gone off, so it had to be sometime before 6:00 AM. I was not prepared (mentally or logistically) to make observations on the foraging behavior of this moose. However, I can't seem to resist the sound of those burdened grunts! You cannot make these observations when *you* want; they have to be made when a moose decides to share its time with you. So I crawled over my comatose husband, John Vucetich, and sprung out of bed. I pulled my baggie field pants on over my sleeping long undies, zipped on a fleece, and slipped on my red Crocs. Later, I realized that I pulled my field pants on backwards. I dug my binocs out of yesterday's pack and grabbed my notebook.

A cow moose was right outside the yurt, toward the Park Service junkyard that we live next to. She was foraging busily. The early morning light was still dim, so making observations was difficult. Nevertheless, I recorded several bites. As she moved deeper into the forest, I realized I was being swarmed with mosquitoes and blackflies, and I had forgotten an essential piece of equipment—my bug shirt. I noted her position and line of movement and headed back to the yurt. I changed into socks, boots, bug shirt, baseball hat, gloves, and citronella spray and headed back out. Despite the ruckus, John showed no signs of awakening. I listened, but heard nothing. I proceeded carefully from where I had last seen her. Then I heard the crack of a hoof on a twig, and the methodical munching of leaves. I began to record more foraging observations. As the morning light became brighter, I noticed her pattern of hair loss (caused by winter ticks). The pattern was different from those which I had seen this year. This was our first meeting, this cow moose and I. I thought I knew all the moose who had been foraging in this area. Then I saw something I recognized—a tear on her left ear. I had met this moose before—two years before. In the summer of 2004, she and I had spent quite a bit of time together. That year, she had a calf, and I helped a German film crew video-record her at a nearby mud lick. It was great to see an old friend, and it made me smile to know she was still doing well. She now carries a tumor on her right shoulder (these skin tumors are common and typically benign). I think that's new since we last met (I'll check my notes). She continued to forage, and I continued to record. She is a moving browser—no standing in one spot and gorging. She takes a few steps and a few bites and a few steps. I'm sure this works for her, but it does make recording a challenge. This morning she eats lots of yellow birch leaves—both from branches on tall trees and from small suckers. Each birch bite is nearly matched with bites of lady fern and *Dryopteris*, and supplemented with hazel leaf here and a maple leaf there. After some time, she continued foraging, but began moving a bit more quickly—too quickly for me to handily follow, observe, and write notes. It is amazing how swiftly they can move while still appearing to be just meandering casually. I was disappointed that she was getting too far away from me to note her foraging. Then she stopped suddenly and looked intently into the forest beyond her. She stood stock still for several seconds. Then she turned and bolted straight for me. In an instant, I felt that she was not charging me, or displaying any type of aggression toward me; but she was beating a rapid retreat from something she had heard, seen, or smelled ahead of her. She trotted toward me—all 800 pounds of brown fur and muscle—and then past me, just an arm's length to my left. She spun around and I could feel her looking over my shoulder from just behind me. There we both stood, both looking intently into the forest. Then I saw it—just a fleeting glimpse of the dark form of a wolf as it ran through the trees just beyond where she had been standing. After her danger had passed, we stood near each other for what seemed a long time—perhaps two-three minutes. I spoke with her and we examined each other carefully. I asked if she remembered me from the mud lick. She leaned toward me, sniffing with ears cocked forward toward me. I stretched out my hand and spoke gently to her. She decided to move past me, and foraged a bit more. She never stopped looking where she had seen danger. She was no longer relaxed and leisurely in her foraging. After a couple of minutes, and just a few more bites, she left the area, walking too quickly for me to keep up. I had been excluded from her moose world and was back into my own. But where exactly was I? I had no map, no compass, no GPS, no glasses or contacts, no sun, and had been on a moose trajectory through the forest. I decided to first look for tracks that may have been left by the wolf, but found no appropriate substrate to record the passing. I began to walk in the direction I thought was home. Eventually, I returned to the yurt, where John was still groggy—hadn't heard the alarm, didn't even know that I had been out, and had no idea that a moose decided that I was the safest thing to put between her and a wolf!

Examples of Observations & Conclusions:

O: She heard grunts outside her Yurt	C: There was a moose outside
O: She hears a crack of a twig and munching	C: She's going in the right direction of the moose
O: The moose suffers from hair loss	C: The hair loss was caused by winter ticks
O: Sees the tear on the moose's left ear	C: She's seen the moose before
O: The moose runs towards her	C: It's trying to escape some kind of danger

Once students are familiar with what an observation is, they will practice making observation in groups of 3 or 4 students. Each group will receive a copy of 5 pictures from my Isle Royale trip. They will then be responsible for making 10 observations (i.e. “there are two girls and three boys in the picture”; “the tent is tan”; “there is a spider on a sandal”, etc) and 3 Conclusions/Inferences (“everyone's wearing rain suits so it must be raining”; “that man is the instructor because everyone's listening to him”; “there is an

animal paw print in the sand so a wolf must have been there”, etc) about the pictures. Then, we will go through the pictures one by one and discuss what each group came up with. This will lead to questions from students about Isle Royal, which I will gladly answer. 😊 As we progress through our novels, we will revisit “observation” as an important skill. Should my students be fortunate enough to visit the island, they will hopefully put their own observation skills to good use while modeling the skills of the scientists we read about.

Isle Royale Pictures for Observation Activity



On a separate sheet of paper, make 10 observations about the picture and draw 3 conclusions about the picture or what’s going on (based on your observations).



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Observations often raise more questions than they answer. Do you have any questions about these pictures, or about Isle Royale in general, after looking at these pictures? What are they?

Day Two: Why Do We Think What We Think About Wolves?

This lesson addresses why we perceive wolves the way we do, and is taken from the Gray Wolves, Gray Matter curriculum at http://www.wolf.org/wolves/learn/educator/gwgm/pdfs/gwgm_sec3.pdf
Students will compare and contrast different versions of the Little Red Riding Hood story.

To start, I will ask students to write out the Little Red Riding Hood story as they remember it. We will then share our versions of the story and list common “strains” on the board. Then, students will break into groups to read different versions of this famous folktale (which are available at the above link as part of the Gray Wolves, Gray Matter curriculum). They will take notes as they read, then, as a class, we will discuss the similarities and differences between the different versions of the story.

Little Red Riding Hood: Please write out the story of Little Red Riding Hood Below. Include as many details as you can remember.

Once upon a time . . .

Now you will read one of four versions of Little Red Riding Hood with your group. As you read, record the answers to the questions below:

1. What is the Name of the Story?
2. Describe the girl:
3. What is her distinctive garment (piece of clothing)? How did she get it?
4. What instructions did she get from her mother?
5. What is she carrying?
6. Where does grandmother live?
7. How does the wolf get to her grandmother’s ahead of her?
8. What’s the situation upon her arrival?
9. How does the story end?
10. What’s the “moral” of the story?

After our discussion, please answer the following question:

What has shaped your perception of Wolves? Are they good or bad? Explain your reasoning.

Day Three: What DO You Know About Wolves?

Again, this lesson is from the Gray Wolves, Gray Matter curriculum and can be found online at http://www.wolf.org/wolves/learn/educator/gwgm/pdfs/gwgm_sec1.pdf.

At the beginning of class, I will break students into group and ask them to identify 5 things they know about wolves and 5 things they've heard about wolves that aren't true. Then, I will collect their papers, and before discussing their responses, we will play Wolf Jeopardy. Once the game is complete, we will discuss the questions and answers together. Then, I will give students time to examine each of the three books and encourage them to start making a decision about which book they'd like to read for their science literacy project. They will be asked to fill out the following worksheet and turn it in to me.

Name _____ Date _____ Hour _____

LITERATURE CIRCLES

1. Rank the books in order from 1-3 with 1 being your first choice, 2 being your second, and 3 being your last choice.
2. Put a checkmark on the line next to any book that you have read before.

RANK _____ READ BEFORE _____

Book: Wolf Stalker

Author: Gloria Skurzynski and Alane Ferguson

Fiction – Part of the “Mysteries in our National Parks” Series

A soulful howl rose, fell, and then faded. It told the man her was zeroing in on his prey. As he fingered the barrel of his rifle, his eyes searched the thick forest growth for signs of his enemy. There! A flash of black fur followed by a streak of silver – instantly he raised his rifle, but before he could take aim, the wolves disappeared into the brush. Once again, they had escaped his bullet. “Don’t care how long it takes,” he murmured. “You’re mine.” Slings his rifle across his shoulder, the man impatiently pushed at branches hanging in his line of sight. Morning light dappled Yellowstone National Park, turning the autumn grass into pale gold. Intent on his quest, the man didn’t notice. He was the stalker; the wolves, his prey.

When Ashley and Jack Landon’s mom is called out to Yellowstone National Park to investigate a reported wolf attack, the kids join in on an adventure of a lifetime. Troy, the Landon’s temporary foster child accompanies the family as they all try to figure out what happened. Can the Landons and Troy crack the case before the public becomes hysterical and turns against the wolves?

RANK _____ READ BEFORE _____

Book: Never Cry Wolf

Author: Farley Mowat

The Amazing True Story of Life Among Arctic Wolves

My head came slowly over the crest – and there was my quarry. He was lying down, evidently resting after his mournful singsong, and his nose was about six feet from mine. We stared at one another in silence. I do not know what went on in his massive skull, but my head was full of the most disturbing thoughts. I was peering straight into the amber gaze of a fully grown arctic wolf, who probably weighed more than I did, and who was certainly a lot better versed in close-combat techniques than I would ever be.

Never Cry Wolf is based on the two summers and a winter the author spent in the subarctic regions of southern Keewatin Territory and northern Manitoba as a biologist studying wolves and caribou. His first-hand account is a remarkable adventure which leaves the reader with an understanding of the myth and the magic of wolves.

RANK _____ READ BEFORE _____

Book: Shadow Mountain

Author: Renee Askins

A Memoir of Wolves, A Woman, and the Wild

It was an odd experience to be sitting in Yellowstone stroking a dead wolf, smelling the sweet scent of sage and meadow grass carried by his body, touching the flesh of an animal that had traveled hundreds of miles to reach this wild place. For the past four years, I had spent my time ricocheting back and forth between the Rockies and the East Coast talking endlessly about the idea of wolves, the possibility of a multitude of scenarios all built on the mythic, imagined wolf. Her he was, dead.

After forming an intense bond with Natasha, a wolf cub she raised as part of her undergraduate research, Renee Askins was inspired to found the Wolf Fund. As head of this grassroots organization, she made it her goal to restore wolves to Yellowstone National Park, where they had been eradicated by man over seventy years before. Here, Askins recounts her courageous fifteen-year campaign, wrangling along the way with Western ranchers and their political allies in Washington, enduring death threats, and surviving the anguish of illegal wolf slayings to ensure that her dream of restoring Yellowstone's ecological balance would one day be realized.

Day Four – 15: Procedure for Literature Circles:

Once we start reading, students will have two and a half weeks to finish their books. They will read one day and discuss the next. To determine how many pages they'll have to read each day, they'll take the number of pages in the book and divide it by the number of days they're given to read. This will determine their reading schedule for the duration of the unit.

On reading days, students will have the entire hour to read. They may choose to read alone, with a partner, take turns reading with other members of their group, or they may elect one group member to read while the others listen. They will have the freedom to move around the room in order to find a place that is comfortable for them. Regardless of how or where they choose to read, students should be cognizant of their role for the following day's discussion. Students who choose to read *Wolf Stalker* will have the option of either answering the discussion questions that I created, or following the discussion guidelines I created for the other two books. I chose to do this because I suspect my lower readers might have more difficulty following the discussion guidelines as independently as everyone else.

Following every reading day will be a discussion day. On these days, students should come to class prepared to discuss according to the role they were assigned for the past day's reading assignment.

In addition to their group discussions in class, students will also be required to post to our class blog once during the first week of reading and twice during the last two weeks of reading. Blogging will allow them to discuss their books with classmates in other class periods. I will also use the blog to post information and facilitate discussions about the Earth Science topics that are touched on in each of the books. I will also post videos about wolves at Yellowstone and Isle Royale National Park. If you look at the *Wolf Stalker* discussion questions below, you will see examples of how I plan to tie Yellowstone, Earth Science, and Isle Royale all together. I am hoping my students can handle the freedom of finding their own connections, but if they struggle with this, I will assist them in finding something interesting!

Wolf Stalker - Discussion Guide (optional)

Chapter 1

1. Where is Yellowstone National Park? Which state? WHY is it a National Park – what makes it special? (ONE PAGE)
2. Have you ever heard of Isle Royale National Park? Where is it? Besides the fact that they're both National Parks, what else do Isle Royale and Yellowstone have in common? (ONE PAGE)
3. Explain, in detail, what "Old Faithful" is and how it works (the SCIENCE behind it). (ONE PAGE)
4. What do you think Olivia will discover by studying the "killing scene". In your opinion, are wolves vicious? Are you afraid of them? Why or why not?
5. Why don't you think Troy shows appreciation for what the Landons are doing for him? Have you ever felt the way you think he feels?

Chapter 2

1. Why did it upset Olivia to hear that news about "the killing" was already *on the news*?
2. Research the History of Wolves in Yellowstone National Park. (ONE PAGE)
3. Research the History of Wolves in Isle Royale National Park. (ONE PAGE)
4. Do you believe Mr. Campbell's story about the death of his dog, Rex? Why or why not?
5. What does Olivia mean when she refers to the radio callers' comments as "hysterical propoganda"?
6. Explain how the Mammoth Hot Springs work. Why are they different colors? What is travertine? (ONE PAGE)
7. At the end of chapter two, Jack thinks Troy might be crying, but then dismisses the thought because "a tough kid like Troy would never cry." Do you agree or disagree with Jack? Is Troy *really* tough? Why or why not?

Chapter 3

1. At the beginning of the Chapter, someone is trying to shoot a wolf. Who do you think it is, and why do you think they want to do it? Is the hunter's location significant at this point in the story? Why or why not?
2. After the wolf saw Jack, Ashley, and Troy, why do you think it ran away instead of attacking them? If you were there, would you have been afraid? Why or why not?
3. Why do you think Troy wants to find the wolf that got shot? What does this "say" about him?
4. Would *you* have gone looking for the wounded wolf? Why or why not?
5. Research what officials at both parks (Yellowstone/Isle Royale) suggest you do if you see a wolf. (ONE PAGE)

Chapter 4

1. How do park rangers REALLY track wolves at Yellowstone and Isle Royale? Is it done the same way it's done in the book? What do they learn by doing this? (ONE PAGE)
2. What type of rock is Granite? How does it form? What is it used for? (ONE PAGE)

3. On page 56, Jack remembers his parents saying “on the entire North American continent, no human being had ever been harmed by a healthy wolf.” Is this really true? Does it surprise you? Why or why not? (ONE PAGE)
4. What do you think Troy will be doing when Jack and Ashley finally find him? Why?

Chapter 5

1. Why do you think Troy shows so much concern for the wolf, after it’s shot?
2. If you were lost in the dark like Troy, Ashley, and Jack what would YOU do? Would you choose to stay with the wolf or go for help? Explain your choice.
3. At the end of the chapter, would you have behaved more like Ashley, and tried to reach out to Troy, or more like Jack, and given up on him? Why?

Chapter 6

1. Why do you think Troy opened up to Jack and Ashley about his life?
2. After hearing about Troy’s life, how do you feel about him? Explain.
3. At the end of the chapter, Jack realizes his dad may have brought Troy into their “cozy world” for a reason. Do you think Jack and Ashley can learn anything from Troy? What?
4. Jack says, “Wolves stay together for life.” Is it true? (ONE PAGE)

Chapter 7

1. Reread page 82 and explain the following: “The protective cloud cover moved away, leaving no barrier against the frigid temperatures.” How do clouds affect how cold/warm it is outside? (ONE PAGE).
2. Research the “terrible lightening fires of 1988” that Jack refers to in this chapter. (ONE PAGE)
3. Research one plant/tree that depends on fire for reproduction. (ONE PAGE)
3. Was it fair for the adults to suspect Troy was responsible for the kids getting lost? Why or why not?
4. Are wolves really an endangered species? What does “endangered” mean? (ONE PAGE)
5. Are there wolves in Michigan? How many? Where are they? (ONE PAGE)
6. Would YOU have given the wolf the tranquilizer? Why or why not?

Chapter 8

1. Do you think Troy’s mom really abandoned him, or are the kids correct in thinking she’d never do that?
2. What do you think the light in the pictures is coming from?
3. Do you think the hair on Silver’s collar will turn out to be dog hair? Why or why not?
4. Do you think Silver killed George Campbell’s dog? Why or why not?

Chapter 9

1. What is your first impression of George Campbell? Is he trustworthy? Do you think he shot Silver? Why or why not?
2. Was it wrong for the Landons to trick Mr. Campbell? Why or why not?

3. How do you think the story will end? What will become of Mr. Campbell? Troy? The Landons? Silver?

Chapter 10

1. Research it! Do young, smart, strong wolves really break away from their pack to start a pack of their own? Has this ever happened on Isle Royale? (ONE PAGE)
2. Troy states that if George Campbell "gets slammed, that'll be fair," and then adds that, "It usually doesn't work out like that. Not in my life anyway." What do you think he means? In your opinion, what about his life is unfair?
3. Are you surprised that Troy's mom didn't intentionally abandon him? Are you happy for Troy? Why or why not?

Chapter 11

1. What are Aspen trees? What do they look like? Where do they grow? Are they found on Isle Royale? (ONE PAGE, include a picture of an Aspen Tree)
2. Research the Wolf Restoration Project in Yellowstone National Park (ONE PAGE)

Summary Discussion Questions

1. Who was your favorite character? Who was your least favorite character? Why?
3. What five (5) questions do you have about wolves? (You MUST have 5)
4. What would you do if you saw a wolf?
5. Are you interested in visiting Isle Royale or Yellowstone? Why or why not?

Discussion Roles for *Never Cry Wolf* and *Shadow Mountain*: Roles should be assigned before each reading day! Group members should carry out their duties as they read and then plan to share in the discussion the following day. At the end of each discussion, members will switch roles to prepare for the next reading day. [Students in the Lit Circle will have a different job every discussion day and will rotate from one job to the next on the list below]



Artful Artist

Your job is to illustrate something that happened in the story. You are to draw and color a picture on a piece of computer paper. Your picture should be a summarization of what you read about during the week. It should be done for homework the night before the discussion group! Neatness Counts! Here are a few ideas to help you out:

A character
A problem
A surprise

A setting
An exciting part
A Prediction of What Will Happen Next
Any Combination of These Ideas

When your group meets, DO NOT TELL what your drawing is. Let them guess and talk about it first!
☺ Then you can tell about it!



Connector

Your job is to find connections between the book and Science, or the book and Isle Royale (which will require some research). It can be anything you want so be creative! Research things you're interested in: trees, plants, public policy, fire... You are to complete this writing prompt on a separate sheet of paper. It should be one page and neatly written or typed.



Blabber Mouth

Do you ever get tired of the teacher telling you to be quiet? Do you ever wish that she would just let you talk? Well....Now you have permission, with one small exception. You will have to talk about what you have been reading. ☺

Part I: As you are reading, jot down a few questions or topics that you would like to share with your group. These should come directly from your OWN reactions to the reading – what did you feel, think,

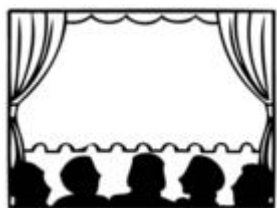
notice, wonder, or want to talk about while you were reading? You should have a minimum of four reactions per reading assignment!

Part II: Mark some lines or section in the text that caught your attention – sections that somehow “jumped out” at you as you read. These might be passages that seem especially important, puzzling, funny, strange, well-written, or striking in some other way. Be prepared to read these passages to your group in class. You must have a minimum of four passages per reading assignment.



Word Whiz

Your job is to be on the lookout for words that are: new, interesting, foreign, or important. The definition of these words will help you understand what you are reading. Find 10 words from your reading assignment and list the word, the page # and paragraph where it can be found, and the definition. Then, during the discussion, quiz your group members to see if they can define the ten words before you share the definitions with them!



Summarizer

Your job is to provide a well-written paragraph (5-7 sentences) that summarizes the main points within the pages you read for each reading assignment. Share this with your group and survey your classmates to see if they have anything to add to your summary.

G. Assessment

Students will keep a discussion log with their every-other-day discussion entries. By the time they finish their book, students should have “role assignments” recorded for each day of discussion. Their grade for this discussion folder will be based on completeness, whether or not the quality of their work improved from beginning to end, and the thoughtfulness and effort put into their entries. Students will also receive a discussion grade from their fellow group members, who will judge them on their level of participation throughout the book. I will give students a participation grade for posting on the blog. Although I’m going to require that they post a minimum of four times, they may post more if they choose. I’ve talked to several other teachers in my building to have blog spots and some of their kids just love it and post all the time!

H. Extension

My blog will serve as an avenue by which to facilitate discussion, about the books, between class periods. I will also use it as a tool to provide students with links to information on Isle Royale and Yellowstone National Park. Both parks have extensive resources online and I will use these resources in the discussions that I manage on my blog.

Examples of blog questions:

1. Where is Yellowstone National Park? Isle Royale? Which park are you most interested in visiting? Why?
2. Have you ever seen a wolf or a moose? If yes, where? Tell us about it! If no, do you want to? Why or why not?
3. What is the best part of your book so far? The worst?
4. Do you think the government should play a role in regulating wildlife populations? Why or why not?
5. How do the observation skills of your main character help him or her be a better scientist?
6. How does the scientist(s) in your story conduct science?
7. As a result of your book, are you more interested in wolves? Why or why not?
8. How do the scientists in your book keep track of the wolves? How do they do it in Yellowstone and Isle Royale National Park?
9. Do Yellowstone and Isle Royale share any geologic similarities? Which ones?
10. How did wolves get to Isle Royale? How did they get to Yellowstone?

Websites we’ll explore include:

<http://www.yellowstonenationalpark.com/geology.htm> - Geology of Yellowstone

<http://www.yellowstonenationalpark.com/wildlife.htm> - Wildlife of Yellowstone

http://www.isleroyalewolf.org/photo_essay.htm - Photos of wolves/moose on Isle Royale

http://www.isleroyalewolf.org/video_essay.htm - Videos from Isle Royale

<http://www.pbs.org/wgbh/nova/wolves/bangs.html> - Reintroduction of Wolves into Yellowstone

<http://www.pbs.org/wgbh/nova/wolves/howl.html> - What’s in a Howl?

<http://www.nps.gov/archive/yell/yellowstoneindepth/index.htm> - Videos: Wolves, Supervolcano, Water

http://earthobservatory.nasa.gov/Newsroom/NewImages/Images/isleroyale_17_2001268_lrg.jpg - Isle Royale satellite image

http://www.isleroyalewolf.org/educ_mat'ls/educ_video/index.htm - History & Research on Isle Royale

As our Literature Circles draw to a close, students will be required to plan a trip to Isle Royale using the following guidelines:

Plan a Trip to Isle Royale!

For this assignment, you are required to research and plan a trip to Isle Royale for your entire family (or everyone who usually goes on your family vacations). This is an individual assignment. You **MUST** include the all of the information below.

- ◆ How are you going to get there? What are three ways you **COULD** get there? How much does each cost? Where does it leave from?
- ◆ What are ten guidelines that all users of the island must follow?
- ◆ Do you **HAVE** to bring a tent to Isle Royale? Where else might you sleep? (At least two places)
- ◆ How and what will you eat while you're there? Plan at least a 3-day menu (breakfast, lunch, dinner)
- ◆ Explain "Leave No Trace" and provide a list of items you will take with you.
- ◆ Provide a list of items that you should **NOT** take to the island.
- ◆ Make a list of three trees that you can find on Isle Royale with a short description and picture of each.
- ◆ Make a list of three flowers you can find on Isle Royale with a short description and picture of each.
- ◆ Study the map of Isle Royale in the classroom. Plan a step-by-step 3-day itinerary.
- ◆ Discover something about the history of Isle Royale. Is there evidence of this time or event on the island today?
- ◆ What is the Greenstone Ridge? Why is it special?
- ◆ Three things you want to see while on Isle Royale.
- ◆ Summarize the significance of the current Wolf/Moose Study on Isle Royale. Would you rather see a wolf or a moose on Isle Royale?

Michigan Science Benchmarks Satisfied by the Unit

MS I.1 Generate scientific questions about the world based on observation.

MS II.1.1 Evaluate the strengths and weaknesses of claims, arguments, or data.

MS II.1.2 Describe limitations in personal knowledge.

MS II.1.5 Develop an awareness and sensitivity to the natural world.

MS III.4.2 Explain how new traits might become established in a population and how species become extinct.

MS III.5.1 Describe common patterns of relationships among populations.

MS III.5.5 Describe ways in which humans alter the environment.

MS III.5.3 Predict the effects of changes in one population in a food web on other populations.

MS III 5.4 Describe the likely succession of a given ecosystem over time.

MS V.1.1 Describe and identify surface features using maps.

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