



Lesson 4

The American Bison: Facing Your Fears



I. The American Bison: Facing Your Fears

II. Brief Description of the South Dakota Feature

The American bison, what we usually call the buffalo, is an iconic feature of South Dakota and her wildlife. The accompanying resource tells the tale of this great beast's near-extinction and ultimately its salvation at the hands of two South Dakota cowpokes/ranchers. One of the interesting features of the bison is its reaction to dangers. Unlike cattle, which instantly flee, the bison faces the danger head-on, whether it be a predator or a storm.

III. Lesson Plan Steps:

A. Anticipatory Set

The counselor or teacher addresses the class: "How many of you have ever heard of the fight or flight response?" Checks on hands and calls on a student to explain what it means. If no one does, teacher responds with: "When we see a danger in our path, we have two options (sometimes there is a third response—freeze-up—but that would only muddy the water here): We can run away from the danger or we can take it on, we can fight it. Which is the better option sometimes depends on the danger. If a venomous snake appears in front of you, it is probably best to just leave him alone. But there are also times, lots of times in fact, when it might be best to face our fears and face the danger. Let's take a look at today's reading to see how one of South Dakota's most impressive animals gives that same message."

Do the reading with the class or as individual students.

B. Objective and Purpose

- The students can summarize the history of buffalo in South Dakota from their halcyon days, to their almost extinction, to the reality today.
- The students will contrast between the danger response of domesticated cattle and the American bison.
- The students will be able to identify examples of perceived threats in their own life and how they can face them, head-on.

C. Resources to be Accessed

1. "The American Bison: Facing Your Troubles" (see below)
2. Biographies of Fred Dupree and "Scotty" Philip, available at the South State Historical Society website

D. Modeling

Provide an example, perhaps from your own life or someone you've read about or know, that has faced a danger—small or large—head-on and overcome it, largely on their own or with help from friends. A common example among teachers is their first day of student-teaching or their first day when they had a classroom of their own, or even just the first day of school of any year with their new class of students. If you were like many educators, some mentor or friend who understood teaching said things like: "never smile before Thanksgiving/Christmas," or "let 'em know who's boss," or "don't let them get you on the

run.” All of this is just intended to say that most teachers fear or are at least concerned that they may not be able to manage a classroom of students, that they will have behavior problems. The truth is that teachers who run from behavior problems will soon have lots of them. You have to face a student acting up with firmness. Facing the problem solves it. Fleeing it (ignoring it) makes it all the more difficult.

Now offer other dangers that students might face: Social isolation, dressing for PE, opening your locker at middle school, having someone call you a name you don't like. Explain what facing the fear might look like and how it helps, and what fleeing the fear might look like and how it won't help or could make it worse.

E. Checking for Understanding/ Guided Practice

Now give the students one reasonable danger for their age and have them think about what facing it looks like, and what fleeing it looks like. Have them share these with the whole class or with a partner or triad. If the latter, walk among the groups and monitor their sense of understanding the message. Feel free to also offer when a danger is really beyond facing and help should be found.

F. Independent Practice

Now have the students identify a fear on their own, perhaps one they have experienced and have them think about a solution. They can write this down if you wish or simply use it as a thought experience. Keep students on-task by asking one or two, quietly as you walk the classroom, to offer their experience.

G. Student-Led Closure

Call on students for this one and put everyone on notice for being called on, not just those who raise hands.

“Ok, who can tell me how many bison there were originally in the Midwest?

What factors caused them to almost become extinct?

Who saved the American bison?

What behavior did we notice that was a contrast between cattle and bison?

Does this behavior have any message for us? What?”

H. Standards Addressed

SD Mindsets & Behaviors for Student Success: K-12 College, Career, and Life-Ready Competencies for Every Student:

B-SMS 6. Ability to identify and overcome barriers.

B-SMS 7. Effective coping skills.

B-LS 8. Engagement in challenging coursework.

B-LS 2. Creative approach to learning, tasks, and problem solving.

Social Studies Standards:

5.SS.6.D: The student explains the interactions between settlers, governing bodies, and Native Americans in South Dakota.

5.SS.9.L: The student explains the role of the railroad, the Black Hills gold rush, and open-range cattle ranching on South Dakota history.

ELA/Reading Standards:

5.RF.4: Reading with sufficient accuracy and fluency to support comprehension:

a. Read grade-level text with purpose and understanding.

6-8RH.1: Cite specific textual evidence to support analysis of primary and secondary sources.

6-8 RH.10: By the end of grade 8, read and comprehend history/social studies texts in the grades 6-8 text complexity band independently and proficiently.

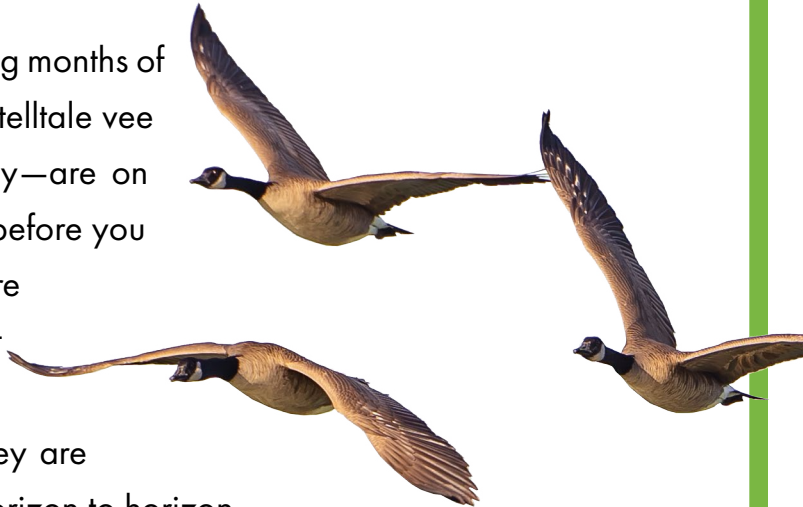
Science Standards:

MS-LS2-4 Construct an evidence-based argument that articulates how changes to physical or biological components of an ecosystem affect populations. (SEP: 7; DCI: LS2.C; CCC: Stability/Change)

MS-LS2-5 Evaluate competing design solutions for maintaining biodiversity and ecosystem preservation practices and services. (SEP: 7; DCI: LS2.C, LS4.D, ETS1.B; CCC: Stability/Change) Alignment may include MS-ETS1-2

The American Bison: Facing Your Fears

If you look skyward during the autumn and spring months of the year in South Dakota, you'll often spot that telltale vee that means geese—Canada and Snow, mainly—are on the move. Frequently, you can hear them even before you see them, especially at night. The City of Pierre has them in such abundance that you can almost walk right up to them on the grounds of the Capitol. During especially busy times when they are migrating, the air seems filled with them, from horizon to horizon.



That may be a bit of an exaggeration, but there was once a bird in the Midwest which did just that, the passenger pigeon. They numbered in the *billions*—biologists estimate there were 3-5 billion of them—and a single flock could number in the millions. When a flock was moving overhead, people reported that the sky dimmed as they blocked out the light and that they could not see the flock's beginning at one edge of the sky or its end at the other. Hunters said that it wasn't even necessary to aim, just point your shotgun into the sky and pull the trigger and several birds would consistently drop.

That last anecdote was, in fact, the problem. Passenger pigeons were so easy to hunt—even with their vast numbers—that by 1900, the last one was seen in the wild. In 1914, the final captive one died in the Cincinnati Zoo. The passenger pigeon was-and is-extinct.

The same thing almost happened to one of South Dakota's most iconic animals, the American bison, i.e., the buffalo. (Its scientific name is kind of unimaginative: *Bison bison*.) Native Americans and the first European visitors to the Midwest reported that the American bison traveled in vast

herds across the Great Plains. Biologists estimate that they numbered 60 million, overall, in the 18th century. When a major herd was on the move, startled by weather or hunters, it was said you could feel the ground shake below you, like some sort of biological earthquake.

Then, by around 1890, only 541 buffalo were left. How could the population be reduced by 99.999% in just a century? Well, it was a combination of things. As domesticated cattle were brought into the Great Plains by settlers, they introduced bovine (cow) diseases to the bison, which had no immunities to them. Many Europeans and Americans loved hunting the bison because they provided a wonderful hide that brought a good price. A single bison provided large amounts of meat and a prized mount for taxidermy. Native Americans also hunted the bison, but the numbers of animals they took had been sustainable (they hadn't reduced herd sizes) for centuries. Finally, as American settlers arrived on the Great Plains, Plains Indian tribes resisted the loss of their lands, resulting in the "Indian Wars." One strategy for winning the war against the tribes, employed by the military, was the elimination of their food sources. Thus, wholesale slaughter of the bison began as a way to hobble the ability of the Native Americans to wage war, while also making them reliant on American food stuffs, provided in forts and on reservations. Professional hunters and amateurs as well would pick off bison from the back of trains, not even stopping to pick up the carcasses, just leaving them to rot where they fell.



South Dakota Tourism, Chad Coppess

And so, the American Bison almost went the way of the passenger pigeon. It might seem like you would only need two animals to save a species, but it actually takes more than that due to problems of genetic variation, unexpected deaths, and even the animals' willingness to mate. That the bison was saved and is today a somewhat familiar sight throughout our state and the Midwest is due in large part to two South Dakotans: James "Scotty" Philip and Fred Dupree.

Dupree ran a trading post at Fort Pierre in the 1830s and 40s. One popular and lucrative trade item was bison pelts. By the 1850s, Dupree was also a cattle rancher near Eagle Butte, S.D. He married Mary Ann Good Elk Woman, a Native American woman of the Minneconjou, and they raised 10 children. Because of the variety of his customers, he spoke English, Lakota, and French, but no one seems to know if he was literate. Between his trading post days and his cattle ranching, Dupree became a very wealthy man. One account reports his net worth at over \$1 million, which equates to approximately \$40 million today.

Part of his wealth came at the expense of the bison. Tens of millions of bison pelts had made their way through his and others' trading posts. Even then, they began to recognize that the tame cattle he and others were bringing into the area were sharing their diseases with the wild bison. He could see the effects the loss of the bison was having on his wife's people and the Lakota people as well.

Perhaps that is why, in 1883, Dupree and his hired hands set out to capture some bison to protect them from further decimation. Now if you're thinking capturing bison is a tricky endeavor, you're right. Some think they managed it by roping the animals while they were sleeping. Others that they built a very



Bison Hide

South Dakota State Historical Society Archives

strong corral, drove the wild beasts inside, and then released the ones they didn't want. Leave it to the robust South Dakota cattle rancher to take on such a job and succeed. In the end, they had five bison calves. Within a few years, the five had become 60.

One of the interesting things about the American bison is its response to danger. When cattle sense a predator is near or a violent storm is on the way, they flee from the danger. In a predator, like a wolf, that causes a chase or attack response. So, by fleeing, cows make matters worse. When the danger is a storm, by running with the storm, they actually increase the amount of time they are in it.

Bison don't act this way. Instead of turning tail and running, they face the storm and the wolf head-on. The adult males stand near each other and look directly into the threat. If that threat is a predator, the other animal now faces a wall of pretty imposing looking bull bison. If it is a storm, they let it pass over, lessening the time they find themselves beneath the storm clouds, driving rain, and lightning.



South Dakota Tourism, Chad Coppess

Enter James "Scotty" Philip, a Kansan who had come to our state (still the Dakota Territory) during the Black Hills gold rush. That didn't pan out (yes, that's a pun) when he was caught by the Army for trespassing on Indian Territory, which the Black Hills were at that time. Philip turned to a number of other jobs before settling, like Dupree, on cattle ranching. And he was good at it, running 20,000 head at one point.

Dupree died in 1898 and, Philip, influenced by his Lakota wife, Sarah Larribee, bought his herd of about 75. Thirteen years later, it had grown to 900. Any number of buyers purchased the animals, including the State of South Dakota, which took on 36 of them, placing them in Custer State Park. Descendants of these animals can be seen in Custer State Park today but also on the Ray Houck ranch, the Ted Turner Ranch, and dozens of other ranches and parks and reintroduction programs across the Midwest and beyond.

These ranchers knew and respected the bison, and the fear of losing them completely drove their motivation to save them. Sure, they could have waited and hoped for someone else to do it while sitting idly by, but instead, they faced the storm and put in the work to restore and protect these great animals. When we experience danger or a threat of whatever kind, we might want to consider if it would be better to face it head-on like the great American Bison.



South Dakota State Historical Society Archives

Scotty Philip Buffalo Ranch, Fort Pierre SD



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Want to learn more?

If you're like most South Dakotans, you've seen bison around. Many ranchers raise them for their meat, and buffalo burgers are an iconic and healthy, lean treat. To really experience the American bison, though, try visiting the Buffalo Roundup they hold every year in Custer State Park. You'll see a large herd of the beasts being wrangled by true South Dakota cowpokes. The immensity of the animals and the impressiveness of them in a large gathering are worth taking in. When you do so, try to imagine 60 million of them pounding across the grasslands of the Midwest.