**The Response of Bison to Fire**

| **Name:** | **Class/Period:** | **Date:** |
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**Part A: Background Information/Slideshow Presentation**

*Use the slideshow to help respond to the prompts below.*

**1)** Where is The Nature Conservancy’s Tallgrass Prairie Preserve located?

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**2)** What is one way the preserve is managed to help it function more naturally?

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**3)** In which ecoregion is the preserve found? What are a few characteristics of this ecoregion?

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**4)** What type of agricultural production is practiced over most of the Flint Hills since the region’s soil is too shallow and stony for farming? Which native animal was reintroduced to the Tallgrass Prairie Preserve to perform this function?

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**5)** Why is the natural disturbance of fire used to manage the Tallgrass Prairie Preserve?

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**6)** What is prescribed fire?

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**7)** How do ranch managers decide where and when prescribed burns will be conducted on the preserve?

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**8)** What two types of information was collected by the GPS collars used on the preserve’s bison? How could this information be used to study the response of bison to fire?

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**Part B: Map Analysis**

*By manipulating the layers of the map appropriately, respond to the prompts below.*

**9)** Using these layers on the map, **1)** **March GPS - Bison, 2) Bison Unit, and 3) 2009 Winter/Spring Burns**, describe any apparent spatial relationship between the bison and burned patches during March. Why do you think the relationship or lack of relationship you described occurs during this month?

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**10)** Using these layers on the map, **1)** **April GPS - Bison, 2) Bison Unit, and 3) 2009 Winter/Spring Burns**, describe any apparent spatial relationship between the bison and burned patches during April. Why do you think the relationship or lack of relationship you described occurs during this month?

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**11)** Using these layers on the map, **1)** **May GPS - Bison, 2) Bison Unit, and 3) 2009 Winter/Spring Burns**, describe any apparent spatial relationship between the bison and burned patches during May. Why do you think the relationship or lack of relationship you described occurs during this month?

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**12)** What is a question for future research that results from your findings? Describe data that would be needed to answer your question.

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**Part C: Submission of This Student Worksheet**

*Follow the instructions provided by your instructor to correctly submit your worksheet.*