



UNIT: H15 TITLE: Quantifying the Impact of Eastern Red Cedar

TYPE: Student Worksheet 1

Quantifying the Impact of Eastern Red Cedar Name:

Thinking back to the engage and your observations, the prairie with established Eastern Red Cedar produced larger flames and the conversion of energy as fuel in the fire was larger. The Eastern Red Cedars also interfere with the growth of grasses and forbs, which can have ripple impacts throughout the ecosystem. This is also an important factor for cattle ranchers, as the invasion of Eastern Red Cedar impacts the biomass that can be consumed by cattle. Understanding and quantifying the impact of Eastern Red Cedar is important to the health of the prairie and to ranchers.

Using the [Red Cedar Forage calculator](http://www.ksfire.org), (Source: www.ksfire.org) explore the impact Eastern Red Cedars on available producer biomass by using different scenarios. Give yourself a hypothetical 1000 acres.

Determine Operational Definitions:

Well Managed: How many trees per acre _____ and what percentage of each size? _____ 5-10 ft _____ 10-15 ft _____ 15-20 ft _____ 20-30 ft _____ >30 ft

Moderately Well Managed: How many trees per acre _____ and what percentage of each size? _____ 5-10 ft _____ 10-15 ft _____ 15-20 ft _____ 20-30 ft _____ >30 ft

Unmanaged: How many trees per acre _____ and what percentage of each size? _____ 5-10 ft _____ 10-15 ft _____ 15-20 ft _____ 20-30 ft _____ >30 ft

What were your operational definitions based upon?

Acreage Management	Estimated Loss of Biomass (from calculator)	Benefits of this Management Strategy	Tradeoffs of this Management Strategy
Well Managed			
Moderately Well Managed			
Unmanaged			

How to Use the Calculator:

1. Download the spreadsheet

2. Go to the input template tab and enter data--note that you may need to click around to get to the cell where you can enter your operation definitions
3. Enter your operational definitions for the management type in the appropriate cells
4. When all the figures are loaded, hit the calculate button, this will take you to your output data.