

Environmental Changes Mule Deer Habitat Restoration Plan

Estimated Time: 15-20 minutes

Age range: 3rd

What you need: a pencil, this page or a blank page for drawing, colored pencils or crayons

Background Information:

All living things need food for energy, water for hydration, shelter for protection, and space to move and grow. These four things that all living things need are actually part of what scientists call a habitat. A **habitat** is the natural home for living things that has everything an organism needs to survive.

New Words

Habitat – a natural home for living things that has everything an organism needs to survive

Organism – any plant, animal, or other living thing

Habitat restoration – helping the recovery of habitat that has been damaged or destroyed

Imagine a Mule Deer in its natural habitat. Write or draw an example of each of the four parts of its habitat:

Food: _____

Water: _____

Shelter: _____

Space: _____



And/or draw:

Food:

Water:

Shelter:

Space:

Northern Nevada is mostly made up of **rangelands**. These **rangelands** are made up of people and animals farming and grazing and doing their best to live. Habitats for Mule Deer and other wildlife in rural Nevada can be damaged or destroyed by humans or nature. Here are some ways that this can happen:

- Rangeland can be overgrazed by horses and/or livestock (like cows).
- People can build towns and cities where Mule Deer live.
- Natural disasters like fire can damage Mule Deer habitat and help invasive species (plants & animals that are not from the area) to grow, like cheatgrass.
- Some native species (plants & animals that are from the area), like pinyon – juniper forests, can invade rangelands and can damage the Mule Deer’s habitat when there are too many trees, too close together.





When the rangeland habitat changes, Mule Deer and other wildlife might have to move to a new habitat. The good news is, scientists and ranchers have some ways to keep Mule Deer habitats healthy and safe.

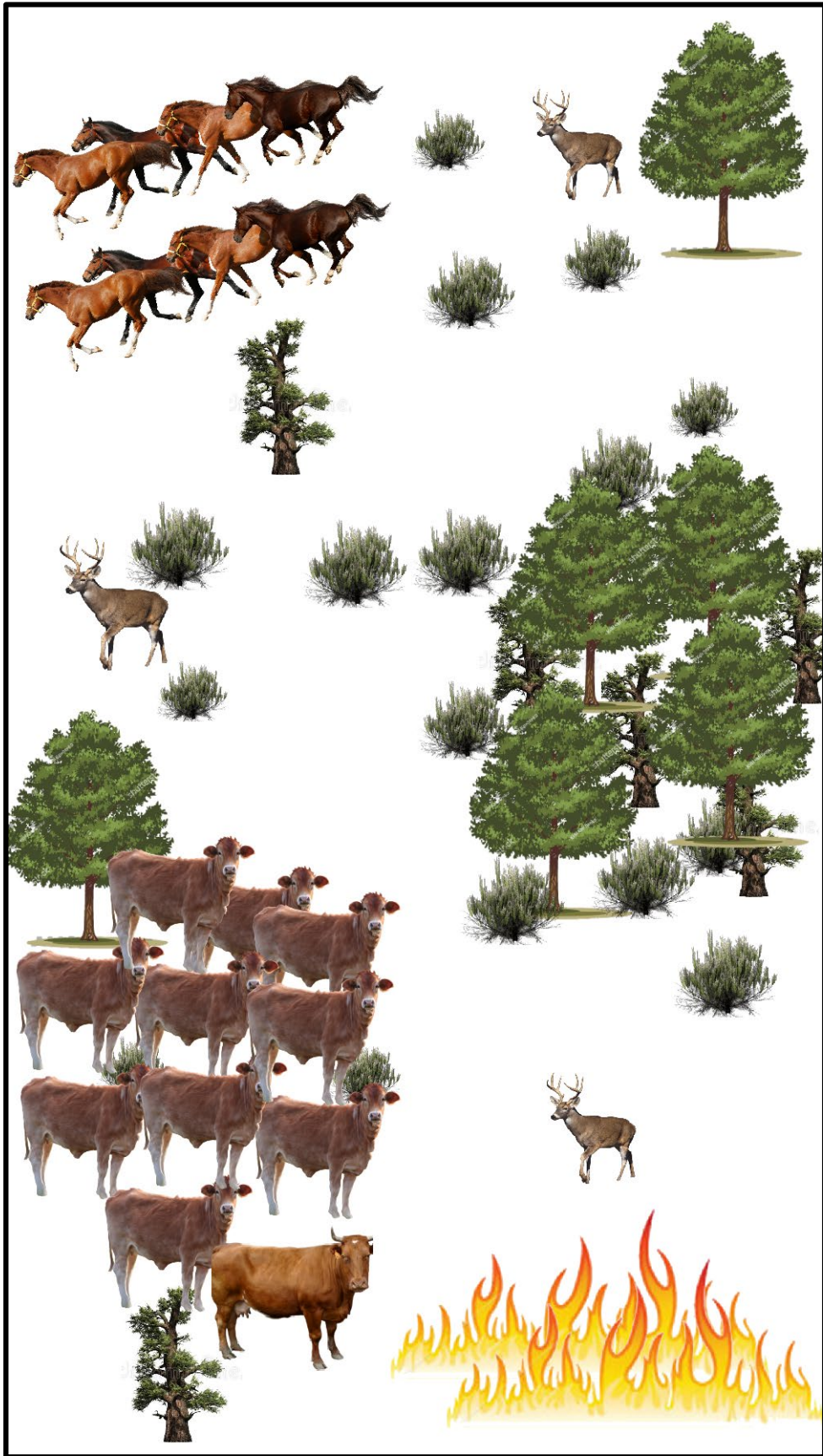
Habitat Solutions:

1. Scientists plant **native plants** to make sure Mule Deer have healthy food to eat, especially after fire.
2. Scientists and ranchers can stop over grazing by **building fences** to keep out horses and **moving livestock around for grazing**, so they do not overgraze the Mule Deer’s habitat.
3. Scientists can **cut down pinyon – juniper trees** so there are less trees and they are farther apart.

Instructions:

1. Look at the map below (page 3). The whole map is of Mule Deer habitat and there are several threats to the health and safety of the habitat. **Circle** things on the map that could be threats to the Mule Deer’s rangeland habitat.
2. Use the chart to plan what solutions you will use to help make the Mule Deer habitat healthier. **You have a budget of 100 points.**
3. Draw or sketch your solutions (answers) on the map to see if you helped remove every threat to the Mule Deer habitat that you circled on your map.

	Points	How many?	Total	Symbols
Native Plants	5 x	_____	= _____	
Moving Cows	20 x	_____	= _____	
Fencing	10 x	_____	= _____	
Cut Trees	10 x	_____	= _____	



Observe your map and answer the questions below:

How will your plan help make the Mule Deer habitat healthier and safer?

Are there any other ways that humans can help keep Mule Deer habitats safe?

What kinds of other animals could these habitat solutions help besides Mule Deer?

For more information on Mule Deer conservation efforts, please visit the Nevada Department of Wildlife link below:

http://www.ndow.org/Nevada_Wildlife/Conservation/

Sources:

Mule Deer picture:

<https://www.sagegrouseinitiative.com/how-do-mule-deer-use-sagebrush/>