



## NEVADA CLIMATE CHANGE PORTAL

### Transect Vegetation Zone Investigation

**Grade:** 9<sup>th</sup> – 12<sup>th</sup>

**Objective:**

The purpose of this investigation is to closely examine seven vegetation zones on the Nevada data transects and successfully match images and graphs of temperature and precipitation to the transect sites.

**Materials:**

Table of the dominant plant species found at each of seven transect sites.

Images of each transect site

Temperature and precipitation vs. month graphs of each site.

Images of individual plants found at the transect sites.

**Important Terms:**

Dominant plant species

Sheep Range

Snake Range

Vegetation zone

Temperature and precipitation vs. month graphs

**Diving question:**

What plant species dominate many of the vegetation zones found at seven sites on two data transects in Nevada and what are the temperature and precipitation characteristics of each site?

**Investigation:**

Examine the images of seven transect data sites. Match the transect sites in the table below to the site images by number. Once you have matched the transect images to the sites listed in the table below, examine the temperature precipitation graphs match each graph to one of the sites on the table.

Use any resources available to you, including the internet, to find both more information and images for the dominant plant species for each zone. A set of labeled plant images is provided for reference. This information will help you match the images and graphs of each zone to the transect zones on the table below.

## Transect Vegetation Zone Investigation

Table 1. Site descriptions of locations along the two NevCAN transects.

Transect	Zone	Dominant Plant Species	Altitude (m)	Site Image	Graph
Snake	Salt Desert	<i>Sarcobatus vermiculatus</i> , <i>Atriplex confertifolia</i>	1560 (5120 ft.)		
Snake	Sagebrush	<i>Artemisia tridentata tridentata</i> , <i>Sarcobatus vermiculatus</i>	1790 (5870 ft.)		
Snake	Pinyon-Juniper	<i>Pinus monophylla</i> , <i>Juniperus osteosperma</i>	2200 (7220 ft.)		
Snake	Subalpine	<i>Pinus longaeva</i> , <i>Pinus flexilis</i>	3355 (11,000 ft.)		
Sheep	Desert Shrub	<i>Larrea tridentata</i> , <i>Ambrosia dumosa</i>	900 (2950 ft.)		
Sheep	Blackbrush	<i>Yucca brevifolia</i> , <i>Atriplex canescens</i>	1670 (5480 ft.)		
Sheep	Montane	<i>Pinus ponderosa</i> , <i>Juniperus osteosperma</i>	2320 (7610 ft.)		

Site Image A



Site Image B





Site Image C



Site Image D



Site Image E



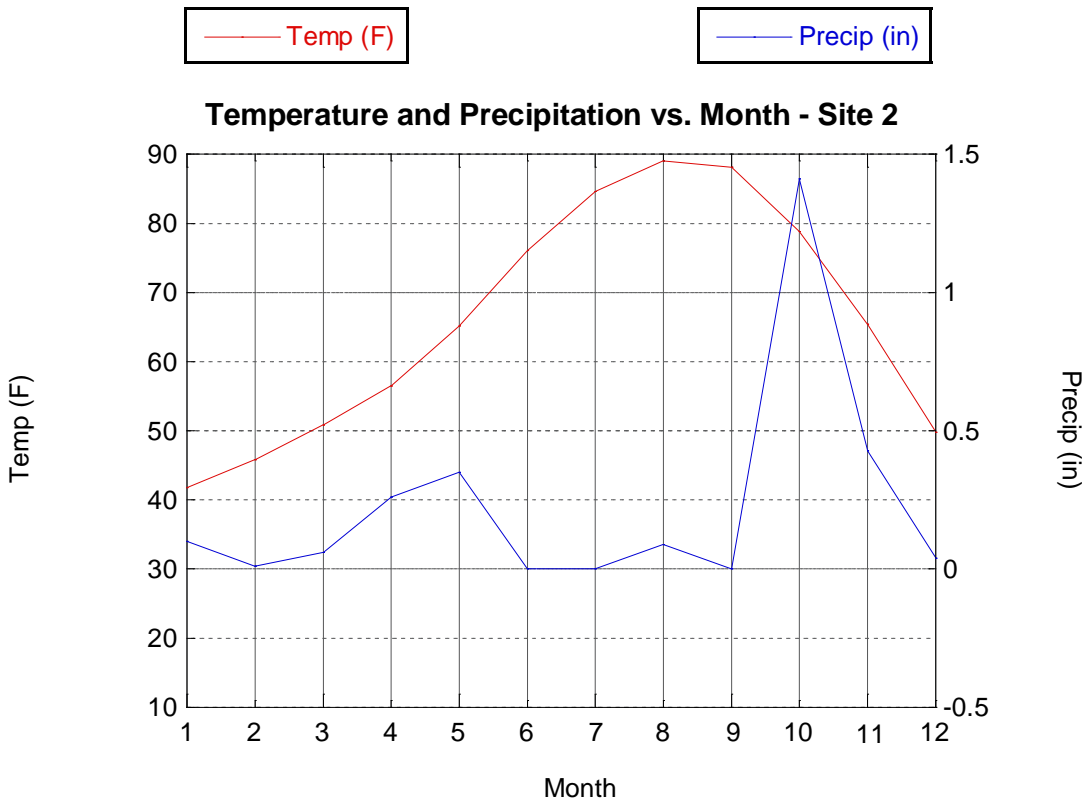
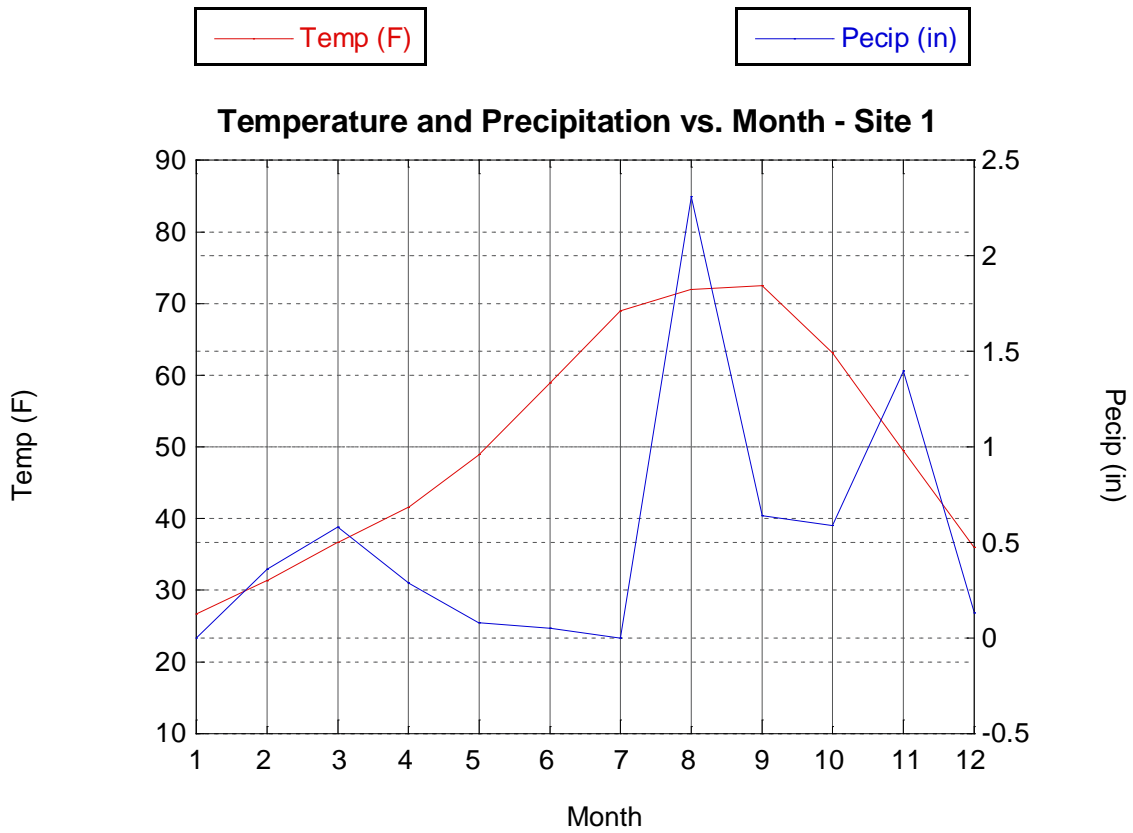
Site Image F

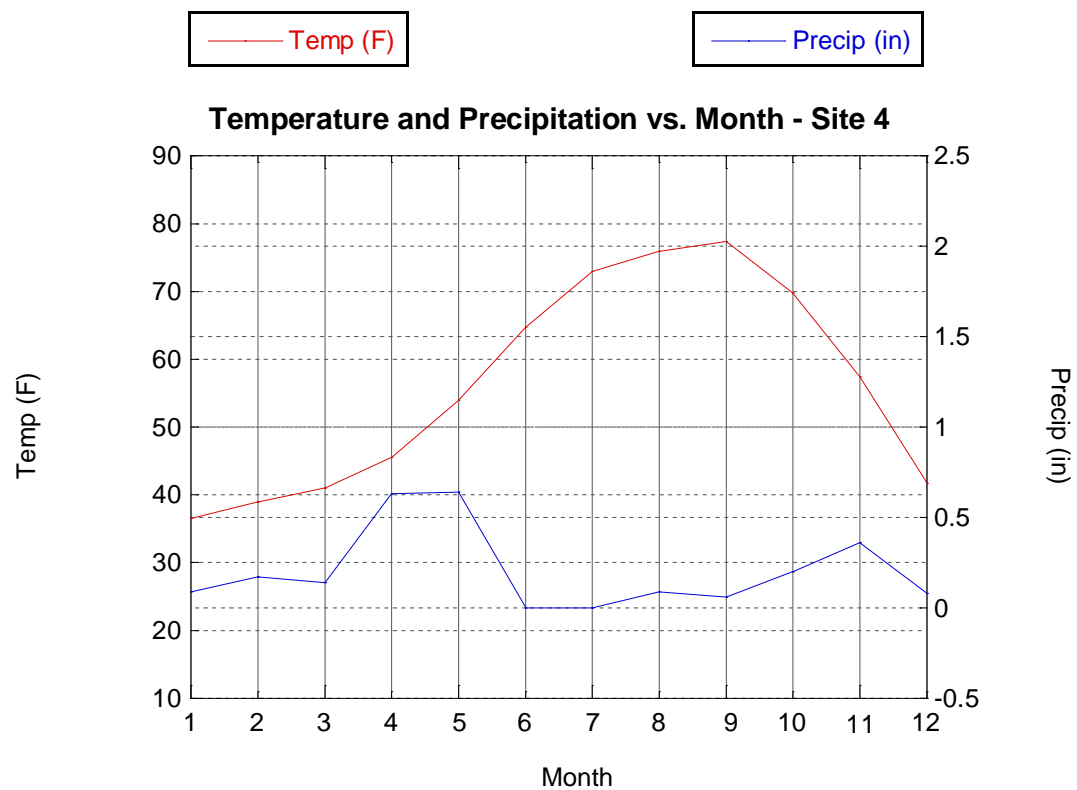
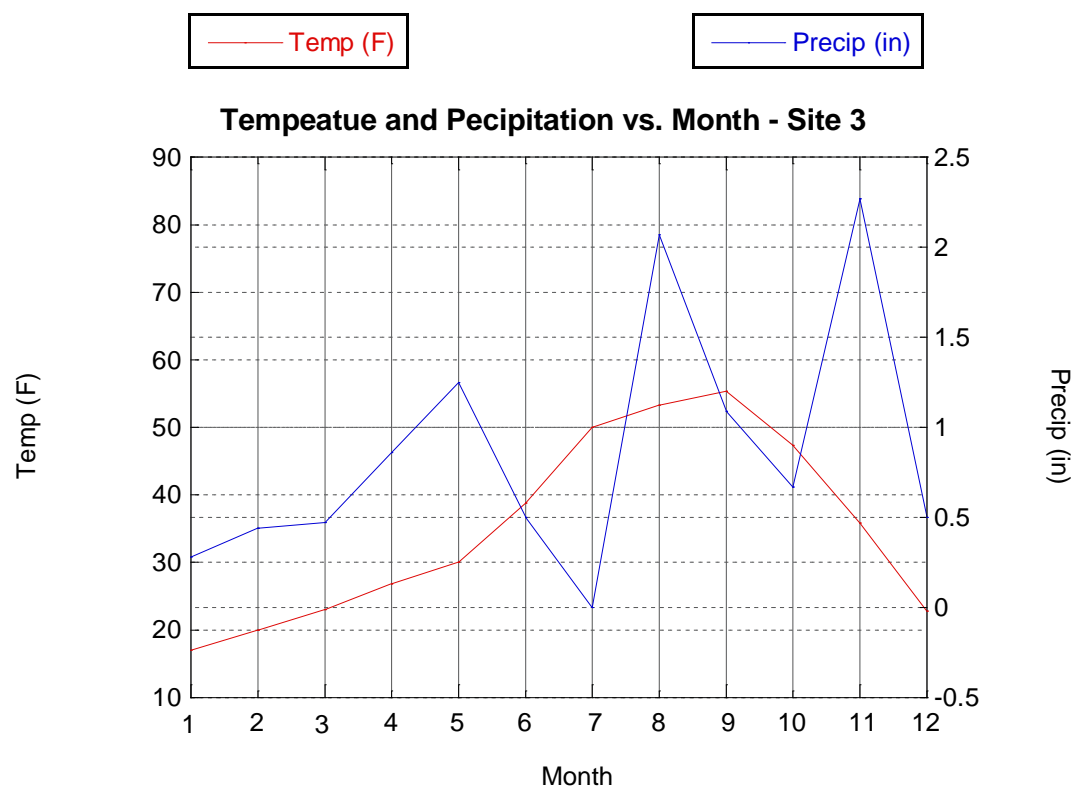




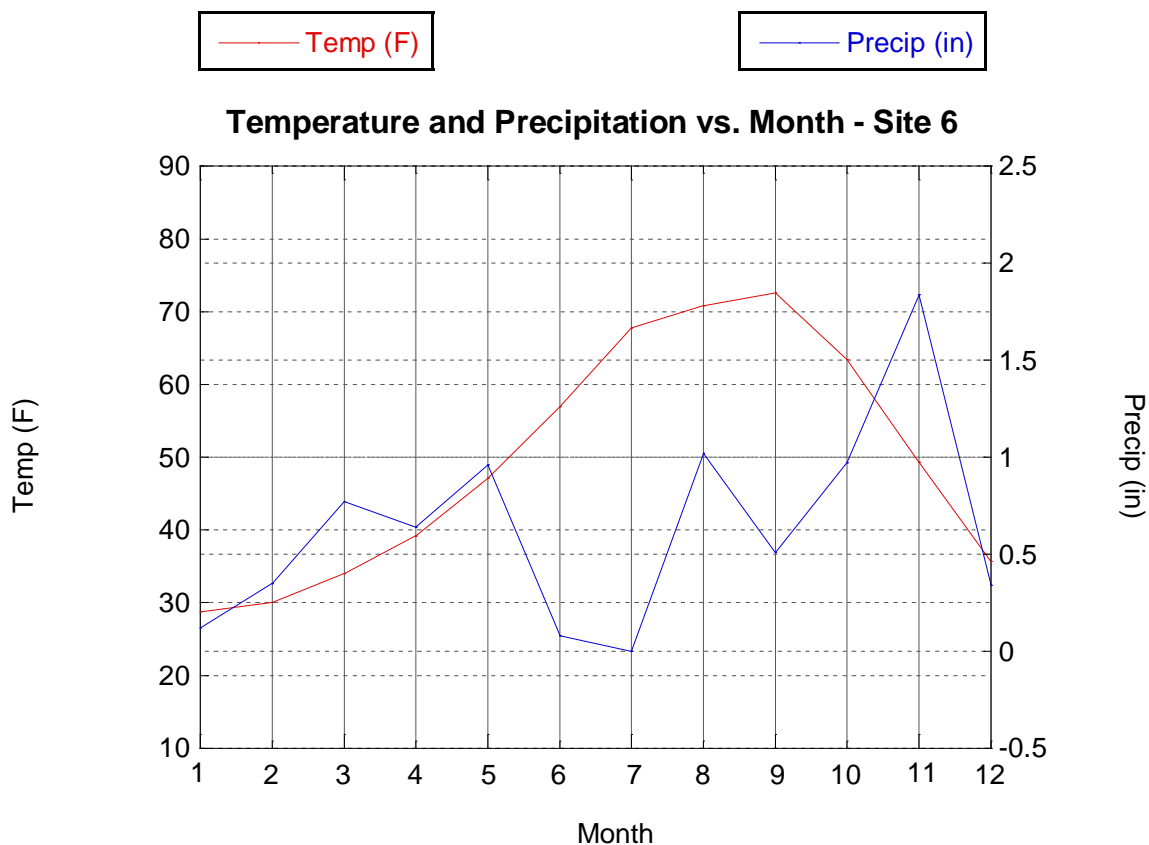
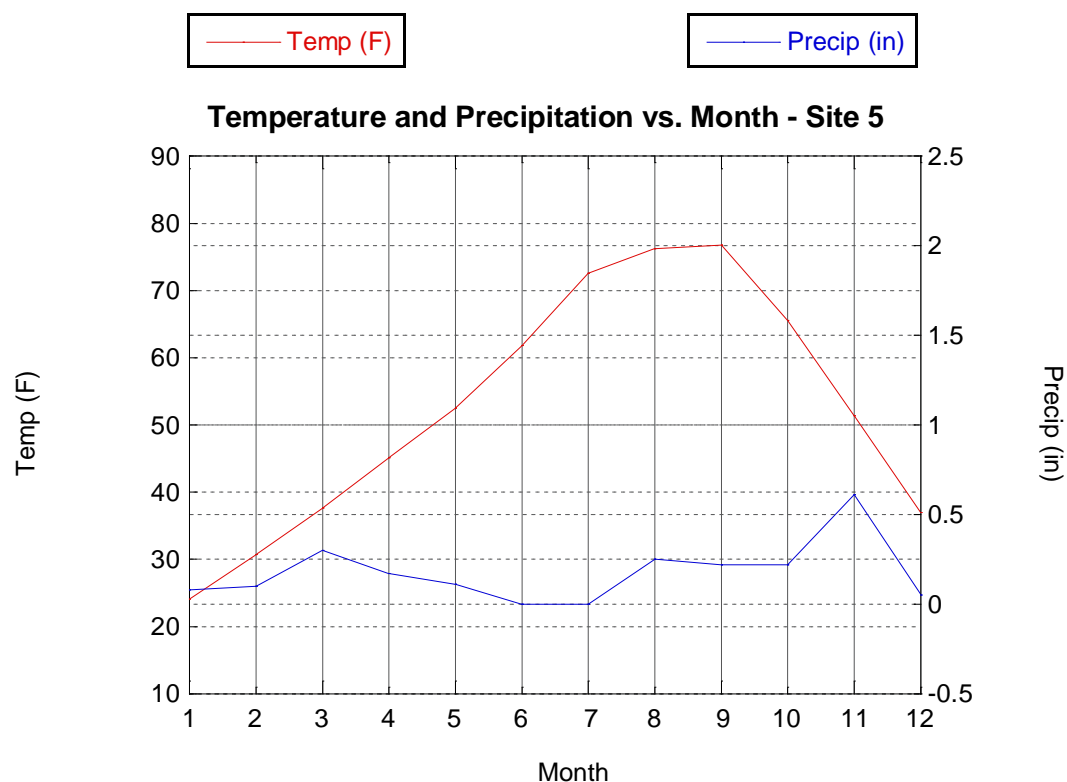
Site Image G

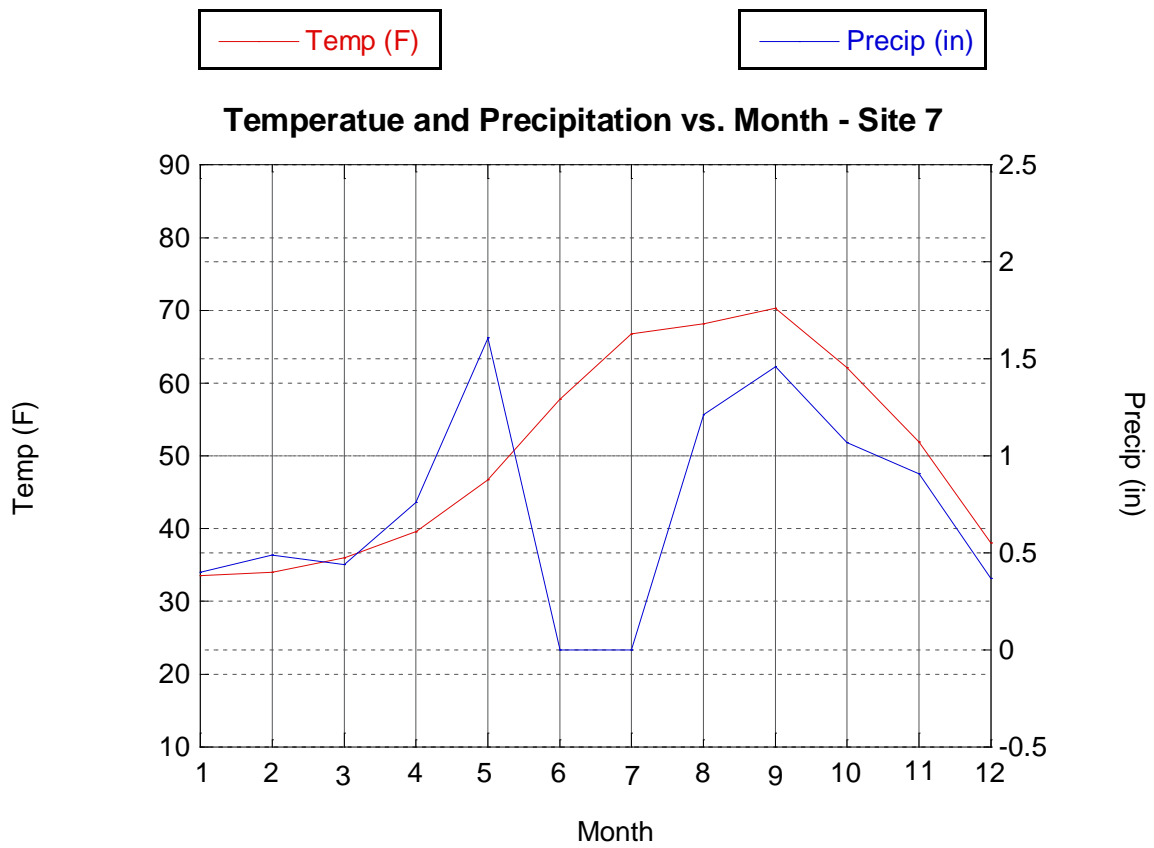












## Images of Plants Found in the Transect Vegetation Zones



Greasewood (*Sarcobatus vermiculatus*)



Shadscale (*Atriplex confertifolia*)



Sagebrush (*Artemisia tridentata tridentata*)





Pinon pine (*Pinus monophylla*)



Juniper ( *Juniperus osteosperma*)



Bristlecone pine (*Pinus longaeva*)



Limber pine (*pinus flexilis*)





Creosote bush (*Larrea tridentata*)



White bursage (*Ambrosia dumosa*)



Four-wing saltbrush (*Atriplex canescens*)





Joshua Tree (*Yucca brevifolia*)



*Ponderosa pine* (*Pinus ponderosa*)