National Park Service U.S. Department of the

Discover a resilient land with a powerful past American kestrel

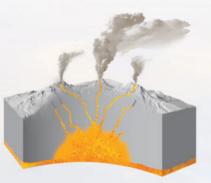
# MAJESTIC LANDSCAPE

### Vast, wild, and stunning.

Lush montane grasslands, scenic vistas, oldgrowth ponderosa pine, and diverse habitats help make Valles Caldera a land of volcanic enchantment.

This dynamic landscape is recovering from overgrazing, aggressive logging, and roadbuilding. Unnatural wildfires and changing climate have also disturbed the land.

Valles Caldera National Preserve is working to restore these ecosystems and protect the caldera's nature, scenery, and cultural stories for generations to come.



#### ERUPTION

You are standing in a sunken volcano. Its eruption 1.25 million years ago was 300 times larger than Mount Saint Helens' in 1980. Ejected ash fell as far as Kansas, Utah, and Wyoming. The science of large-scale explosive volcanism began with studies here.

DID YOU KNOW? VALLES CALDERA HELPED PROVE THE THEORY OF PLATE TECTONICS! A classic example of Earth's explosive forces, Valles Caldera features in many scientific discoveries. Scientists, researchers, and visitors continue to come here to learn about geology, volcanology, and ecology.



Paleoindians (10,000 years Archaic Period hunterago) first regularly visit the caldera and use its obsidian. They are the earliest known of many peoples to use the caldera.

gatherers (8,000-1,000 years ago) rely on the caldera's plentiful waterfowl, game, fish, berries, roots, seeds, and nuts.

Ancestral Puebloans (800 Spanish settlers (1500s) years ago) first settle in the bring sheep and other live-Jemez Mountains. They grow stock to these grasslands. crops and build masonry field- Herding is the land's primary houses and pueblos in lower use into the Mexican period elevations that suit agriculture. (1821-48).

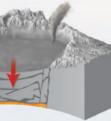
HISTORY GROVE

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## THE POWER OF MAGMA



#### **COLLAPSE**

A bowl-like depression formed when a vast amount of magma erupted rapidly, the huge magma chamber emptied, and the land above sank into the vacant chamber. Valles Caldera is one of the world's best examples of an intact volcanic caldera.

RESURGENCE

After the collapse, new magma filled the chamber and caused the caldera floor to heave upward. A central dome (Redondo Peak) surged. Valles Caldera is a defining example of the caldera resurgence phenomenon, which researchers first identified here.

## CULTURAL CROSSROADS

For millennia people were drawn to the caldera for ample natural resources to make tools, projectile points, medicines, and more. Past people prized the caldera's obsidian for making knives, arrowheads, and spear points. Obsidian (volcanic glass) often occurs with calderas and forms from highsilica magma that rapidly cools. Obsidian from the Jemez Mountains has been found at prehistoric sites in Nebraska, North Dakota, Texas, northern Mexico, and Mississippi. Since we can trace obsidian to its volcanic origin, we know Valles Caldera was one of North America's most culturally significant obsidian sources.

These obsidian points can be traced to Valles Caldera and the Archaic Period.

## REKINDLED ECOSYSTEMS

Thriving forests and grasslands depend on cycles of wildland fire. A century of logging, overgrazing, and fire suppression interfered with normal fire regimes. Wildfires in 2011 and 2013 burned two-thirds of the preserve. Large areas lost all living trees and understory vegetation; erosion from monsoons stripped away the soil and created large debris flows. But returning lowintensity fire can restore these fire-adapted ecosystems. Prescribed fires imitate healthy natural fires and can help reduce forest fuels, recycle nutrients, and increase habitat diversity.

Fire managers perform a prescribed burn at the preserve.

CERROS DEL ABRIGO

**People have** used red

derberry

or medici

and food.

VIEW FROM THE PRESERVE ENTRANCE Freezing air and dense lake-sediment soils prevent tree saplings from establishing in the grasslands, creating a distinctive inverted tree line.

in the 1900

left carvin in aspen trees

CERRO LA JARA

VALLE GRANDE

Valles Caldera National Preserve is established (2000). Management of the and cultural values have preserve is transferred from continued throughout these history, serene beauty, and the Valles Caldera Trust to the eras of ownership to the National Park Service (2014). present day.

**American Indians'** connections to this land

Today, **you** can visit Valles **Caldera National Preserve** to explore diverse cultural wild natural wonders in a variety of ways.

The US government grants use Valles Caldera for sheep the land to private owners (1860), known since as Baca Location No. 1. Successive owners of Hispanic and Anglo heritage (1900s)

grazing under the partido system, cattle ranching, logging, geothermal energy exploration, and more.

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