# Sunset Crater Volcano

Sunset Crater Volcano National Monument Arizona

National Park Service U.S. Department of the Interior





Prairie sunflowers face the sun rising beyond Sunset Crater Volcano. They are among the many flowers that bloom during the summer rainy season in and around the park.

## **CHANGE AND BALANCE**

Welcome to the youngest volcano in the San Francisco Volcanic Field-Sunset Crater Volcano. About 1,000 years old, it erupted in a land where people have lived for over 10,000 years. The volcano changed the lives of the ancestral Puebloans and the lives of the animals and plants of this high-desert country. The ground began to shake around 1085 CE (common era). As the shaking grew stronger and more frequent, people knew they had one choice: Leave.

### **Tenacious Life**

Plants began to colonize this new landscape even as lava cooled. Penstemon developed into a new species that grows only here. Ponderosa pine seedlings appeared. Animals slowly came back. Some, like the pronghorn, you may recognize from other arid lands. Others, like the redtailed hawk and Steller's jay, can live in many places. The Abert's squirrel, however, needs particular forests.





This painting by Hopi artist Michael Kabotie Lomawywesa depicts some of his beliefs about the Sunset Crater Volcano eruption. Find it in the visitor center with other art and stories that share Indigenous beliefs about the eruption.



Clouds glow like fire at day's end over the San Francisco Peaks. They erupted about 500,000 years ago-far earlier than Sunset Crater Volcano. Wildflowers thrive in soil carried by rain and melting snow from distant peaks.

Some people sought safety at Walnut Canyon and other nearby communities. They could see ash clouds but were safe from fiery rocks raining down and lava flowing across the land. People's lives continued to change even after Sunset Crater Volcano quieted. These and other stories are told here and at Wupatki and Walnut Canyon national monuments.

At Sunset Crater Volcano National Monument, you can explore how life found a new balance after the eruption-and again over 900 years later. In April 2022 a sudden fire roared through here, fueled by drought and high winds that are hallmarks of global climate change. Whose lives were changed this time? What's coming back? Look for bright green seedlings. Listen for birds tapping burnt bark. Walk trails through old lava where wildflowers still emerge each spring. Take the time to wonder: What will happen next in this land of constant change?



The Abert's squirrel depends on ponderosa pines for food and shelter. It also eats a fungus that helps keep tree roots moist. The squirrel's digging spreads fungi spores. And so fungi keep growing; the tree stays alive; and the squirrel has food and shelter.

This tenacious trio can live through fires of this dry landif they are low and slow. But the 2022 Tunnel Fire was faster and more intense than normal. What does the future hold for these three species?

19009



6 million years ago San Francisco Volcanic Field becomes active near what is now Williams, Arizona.

2-3 million years ago **Eruptions begin northwest**  10,000 years ago People are in this area, moving with the seasons to follow plants and animals

500–700 Common Era People begin settling the land east of San Francisco Mountair

Around 1085 Long-settled communities flee as Sunset Crater Volcano roars to life. For many months it spews cinders and ash. A few years

later, lava flows from its north side to form what is known as the Bonito Lava Flov

Mid- to Late 1200s A long drought gets much worse. Some people begin to migrate again as they search for communities near water.

1300s Peonl 1400s-1700s

Settlers from Europe and the newly established United States begin claiming Indigenous land as their own. People from several continents and many cultures compete for the scant water and

Newcomers and visitors are looting Wupatki and Walnut Canyon and blazing trails up and inside Sunset Crater Volcano.

In 1930 President Herbert Hoover 1960s-70s oroclaims Sunset Crater Volcano US Ani

2000s 2020 census confirms over 73,000 people live in nearby Flagstaff.

In April 2022 the Tunnel Fire burns across the park. Scientists begin to study how animals and plants recover from fire in

600,000-400,000 years ago A towering volcano erupts many times. Its remains are San Francisco Mountain (also called the San Francisco Peaks).

In Wupatki Basin, they trade food and goods with travelers. Others farm land near Walnut Canyon and to the north where Sunset Crater Volcano eventually forms.

Early 1200s People are farming and hunting near the volcano.

these lands for different reasons. They might be seeking better farming areas. Or they might be following traditional knowledge to new lands.

food of this dry land

1800s US geologist John Wesley Powell explores the region and gives Sunset Crater Volcano its English name.

a national monument.

Archeologists find dwellings beneath the volcano's ash. One dates back to 835 CE.

their lunar missions on the park's lava fields.

of climate change.

In 2022 the US Space Program starts planning the Artemis lunar mission. Will astronauts train here again?

Thirteen traditionally associated Tribes maintain deep ties to Sunset Crater Volcano.

VOLCANIC FIELD 0

A legend in a legendary land. This view looks northeast past Sunset Crater Volcano and other cinder cones to the Painted Desert beyond. The San Francisco Volcanic Field includes more volcanoes far to the west and northwest. Sunset Crater Volcano is the youngest of the 600 volcanoes in this massive volcanic field. It's unlikely that Sunset Crater Volcano will erupt again. However, the system is not extinct. A new volcano could erupt some day. Who will witness its birth?

> SUNSET CRATER VOLCANO About 1,000 years old

> > onderosa pine

The contrast in the colors is so great that on viewing the mountain from a distance the red cinders seem to be on fire. John Wesley Powell

## The Volcano After Sunset

When asked about Sunset Crater and the volcanic field, 💌 an Indigenous elder explains, 👘

'We, 'the Havasupai, regard that area as the connection to the universe.

Take a walk after sunset to experience the park at night. The Lava Flow Trail and amphitheater are some of the best places to view the night sky in the region.

Cinder cones seem to embrace the Milky Way. Stars light up the trail. Listen for the wing beats of bats, the feet of night-dwellers skittering across rock. Inhale—is it just your imagination or does this high desert smell a bit different at night?

Here you are at around 7,000 feet elevation, in dry air, and over 10 miles from the lights of Flagstaff. These conditions allow the light from billions of stars to shine through Earth's atmosphere. This clear night sky has earned the monument designation as an International Dark Sky Park.

Can you imagine even more stars shining in this sky? With the exception of the time ash clouded the sky during the eruption of Sunset Crater

Volcano, ancestral Puebloan people probably saw more stars than we see today.

1970s air pollution has decreased as cars and other pollution sources have

Even so, you are seeing a much clearer night sky than just 50 years ago. Since the

become cleaner. Perhaps what you see now is almost as bright and clear as what ancestral Puebloans saw 900 years ago.

Tonto Apache Kaibab Band of Paiute Fort McDowell Yavapai Hualapai Yavapai-Prescott Havasupai San Carlos Apache Hopi Zuni Yavapai-Apache White Mountain Apache San Juan Southern Paiute Navajo The names above are of Tribal Nations Compare this place we call Sunset who have associations with Sunset Crater Volcano National Monument Navajo Nation Crater Volcano that go back centuries. with your own home place. What North This is the place of their ancestors. Each creates beauty where you live? What questions do you ask about the night has stories about the eruption that are Wupatki National similar and yet different. You can find sky? About weather? About forces some of these stories here but know beyond your control? These and more COCONINO that not all are shared. questions often arise in this place of rock and wonder that is as much about

> Hopi women grinding corn, circa 1906.

Cinder phacelia, a scorpion-weed (top), and Newberry's twinpod (bottom) colonize rocky ground, building soil other plants need.

**Emergencies call 911** 

Sunset Crater Volcano, Wupatki, and Walnut Canyon national monuments red jointly

Sunset Crater Volcano National Monument is one of over 400 parks in the National Park System. To learn more about national parks, visit www.nps.gov.



### Re Safe and Protect the Pa

information.

More Information Sunset Crater Volcano National Monument 928-526-0502

a film and exhibits. They provide details about the volcano, ecology, and people of this site.

VISITING THE PARK

The park and its trails are open all

day, every day. Call or check the

park website for visitor center

This part of Arizona is on Mountain Standard Time year-round.

Cell service is unreliable or nonexistent.

### What to See and Do

Take one of the short, accessible trails to overlooks and exhibits. • The self-guiding Lava Flow Trail takes you by a'a lava, squeeze-ups, and other volcanic features. • Plan a longer hike in the park or the surrounding Coconino National Forest. • Drive the Loop Road to Wupatki National Monument. One entrance fee covers both parks.

### Camping

The US Forest Service operates two campgrounds usually open late May to early October. No hookups. Bonito has first-come, first-served and reservable sites. O'Leary is for large groups; reservations are

Sunset Crater Volcano is closed to climbing to protect its fragile structure. • Off-trail travel is not permitted and can be dangerous. Lava is sharp, brittle, and unstable. Stay on trails to protect yourself and the fragile plants and animals that live here. • The Loop Road is narrow and winding and has soft shoulders. Stop only at paved pullouts. • Road surfaces freeze quickly in winter. • Pets must be kept on a leash six feet or shorter. They are allowed only on the paved portion of Lava Flow Trail. Do not leave them in cars even for a few min-

required. Go to www.recreation.

gov for reservations and more

utes; they can die of heatstroke. Collecting wood is not allowed. • For firearms regulations check the park website. • Federal laws protect all plants, animals, geologic features, and archeological objects in the park.

#### Accessibility

We strive to make facilities, services, and programs accessible to all. For more information go to the visitor center, ask a ranger, call, or check the park website and NPS App.



Follow us on social media.

Use the official NPS App to guide your visit. Select "save this park" to use offline. 928-526-1157

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