

## Crawford State Park

This 49-acre forested day-use park features Gardner Cave, the second largest limestone cavern in Washington. This tourable cave is filled with stalactites, stalagmites, rimstone pools and flowstone.

The park is located 11 miles north of the town of Metaline in the extreme northeast corner of Washington state. From the parking lot, a paved trail leads up a small hill about 200 yards to the cave entrance. Cave lights, stairways and walkways provide safety for visitors and protection for the natural resource.

Park staff conducts tours of Gardner Cave for groups of 25 people or less. To pre-arrange a tour, contact the park at (509) 446-4065 or Mount Spokane State Park at (509) 238-4258.

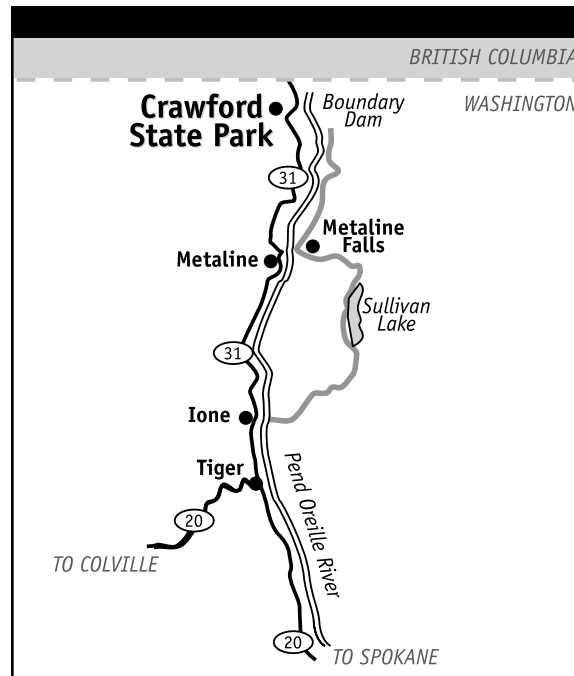
Crawford State Park has one kitchen shelter without electricity, plus two sheltered and 11 unsheltered picnic tables, available on a first-come, first-served basis.

## Park hours

Summer: 9 a.m. to 6 p.m.  
(closed Tuesdays and Wednesdays)

## Cave tours

10 a.m. and 12, 2 and 4 p.m.  
Winter: Closed September through May.



Crawford State Park  
General Delivery  
Metaline Falls, WA 99153

State Parks information:  
(360) 902-8844  
[www.parks.wa.gov](http://www.parks.wa.gov)  
Brochure paid for by donations.

## Washington State Parks and Recreation Commission




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[www.parks.wa.gov](http://www.parks.wa.gov)

### Commission members:

Patricia T. Lantz      Joe Taller  
Fred Olson          Cecilia Vogt  
Rodger Schmitt      Lucinda S. Whaley  
Eliot Scull

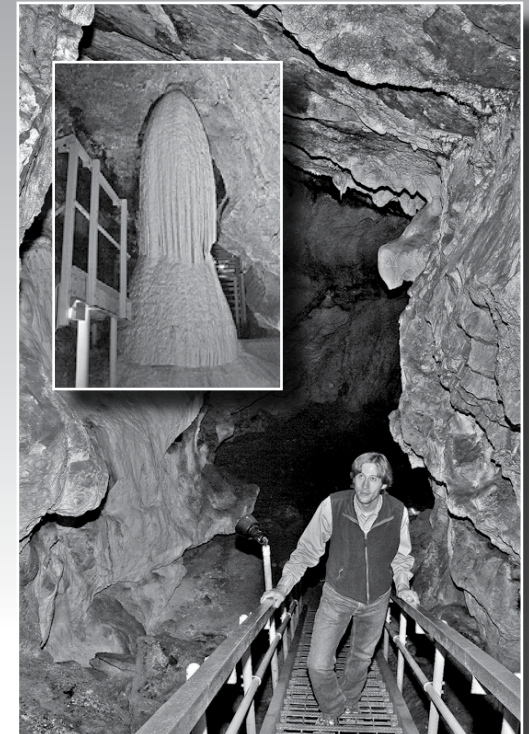
Agency director: Rex Derr

*All Washington state parks are developed and maintained  
for the enjoyment of all people.*

To request this brochure in an alternative format, please call (360) 902-8844 or the Washington Telecommunications Relay Service at (800) 833-6388.  P&R 45-75001-1 (2/2010)

## Washington State Parks

# Your guide to Crawford State Park's Gardner Cave



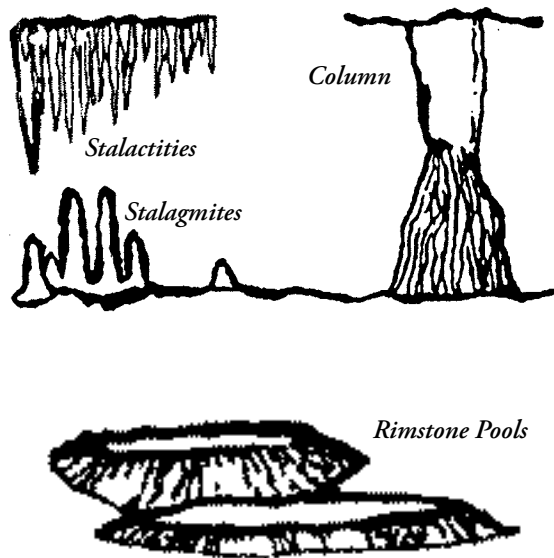
## Geological development of Gardner Cave

Gardner Cave is the third longest limestone cave in Washington state, with a slope length of 1,055 feet. The history of the formation of Gardner Cave began approximately 500 million years ago. As sea creatures died, their shells settled to the bottom and formed a limestone "ooze." This ooze eventually turned into a rock called metaline limestone, which folded and faulted as mountains formed about 70 million years ago.

## The process of creating a cave passage and formations

Limestone dissolves in acid, such as the acid formed when rainwater absorbs carbon dioxide from soil. The weak acid seeps into the ground and, over hundreds of thousands of years, small cracks enlarge as the limestone is dissolved and carried away. Eventually, this process forms a cave passage.

Over the centuries, drops of water find their way through the surrounding limestone to the cave passage. When exposed to air in the cave, the carbon dioxide in the water is released. A deposit of calcite (chemically similar to the original limestone) remains.



## Definitions:

- **Stalactites** form as water drips slowly from the ceiling of the cave, leaving calcite deposits.
- **Stalagmites** form as water drips to the floor, leaving calcite deposits.
- **Helictites** form as water rich in calcite seeps into tiny holes in a cave's rock. Hydrostatic pressure forces a small amount of solution out, carbon dioxide is lost and calcite is deposited.
- **Columns** form when stalactites and stalagmites unite. Gardner Cave's 7.8-ton column is the largest in the Pacific Northwest.
- **Rimstone Pools**, or gours, form when constant drips from the ceiling drill holes into the cave floor. The holes enlarge and merge together to form small basins filled with calcite-saturated water. Ceiling water falls into these basins and causes a disturbance. The water splashes and flows over the outer edges of the basin to deposit calcite and create a rim.
- **Flowstone** forms as water deposits calcite over walls and other surfaces.
- **Breakdown** is an area where pieces of rock and debris have fallen down or broken off from the cave walls or ceiling.

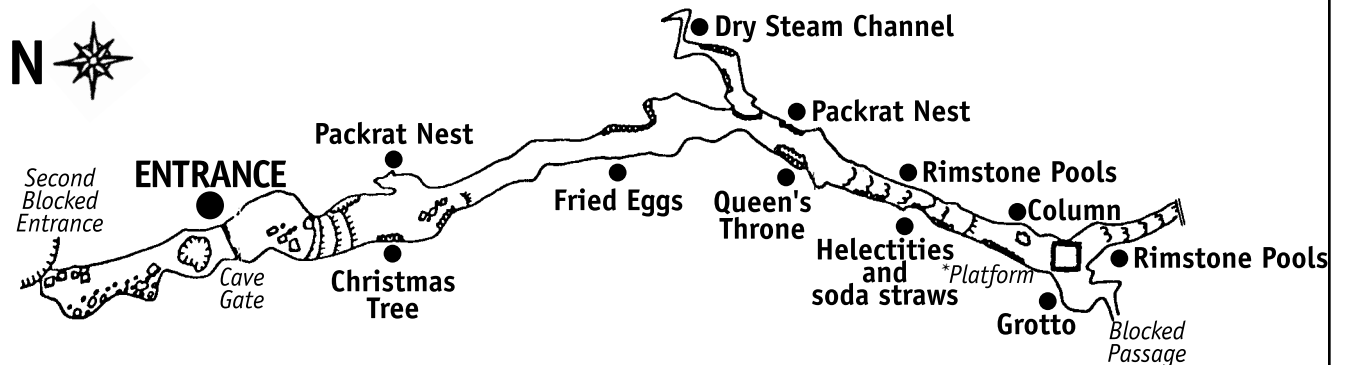
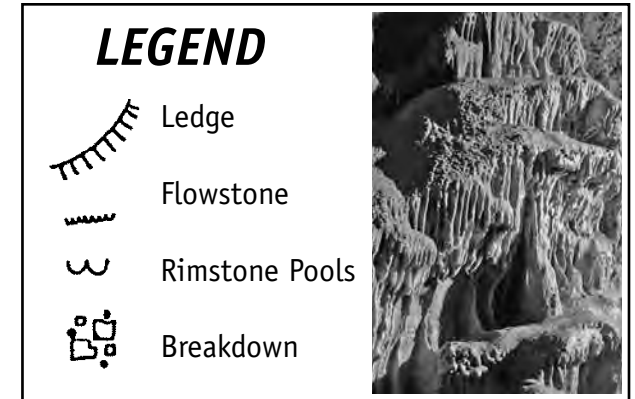
## Things to remember

- Wear a light jacket or sweater. The cave temperature is 41 to 43 degrees Fahrenheit.
- Bring a flashlight. Although the cave is lighted, extra lighting allows you to peer into corners and adds to your enjoyment.

- Bring a camera with a flash.
- Do not touch cave formations. Touching them leaves oil behind, causes the formations to stop growing and turns them from white to gray. Smoking in the cave also causes discoloration. Smoking is prohibited.
- Do not take pets into the cave.

## Human history

Gardner Cave is named for Ed Gardner, a long-time resident and bootlegger in the area, who discovered the cave around 1899. In 1921, William Crawford, a Metaline merchant, acquired the land around the cave. He deeded 40 acres of it to Washington State Parks later that year.



\* Distance from entrance to platform is 494 feet