

Remember, Everything's Connected

Only a few of the relationships found along the trail were discussed in this brochure. Since everything's connected, many more relationships are present. How many more can you find? Here are some others you can search for:



The Hills Are Alive With... Chewing?

Have you seen a patch of red or dying ponderosa pine trees? This is the work of the native **mountain pine beetle**. Adults and feeding larvae tunnel under the bark, chewing on the cambium layer of the tree.

As you walk the Creekside Trail, look for cut, treated trees on the hillside across from the Peter Norbeck Visitor Center. If you hike closer, you may see the "popcorn" pitch tubes on the tree's bark where beetles have bored holes.

Dead Trees: Good?

Standing dead trees, called **snags**, can often provide for more life than living trees. This is because many types of insects live inside dead trees, providing a valuable food source for animals such as woodpeckers and bears. As dead trees decompose, they release their nutrients back into the soil for use by future generations of plants and trees, thus completing the circle.



People and Nature

People have a relationship with nature. The next time you go to the market to buy an apple, remember that the apple was once a flower that was pollinated by insects. Your home, constructed of wood, rock or brick, came from items harvested from nature. As you finish

your hike, take the time to slow down and experience your natural world; and remember, **everything in nature is connected... even you!**



Register Your Hike... Get a Prize!

Thank you for joining us on the trail today. We want you to join the Trail **TRACKer™** Team. It's fun, healthy and free. Best of all, you can earn prizes by walking TRACK Trails™ and TRACKing them on our website. For more information about the Trail TRACKer Team, other TRACK Trail™ adventures near you, or for general information about the **Kids in Parks™** program, please visit our website at:

www.kidsinparks.com

Your Opinion Matters!

We would like to hear about your adventure on the trail today. Your feedback will help us improve the TRACK Trail program and will help us build more and better TRACK Trail Adventures in the future. Please visit our website (www.kidsinparks.com) and give us your opinion about the quality of your experience.

Kids in Parks...

for the Health of our Kids and our Communities.

Custer State Park's TRACK Trail Partners



Kids in Parks Founding Partners



Custer State Park

Nature's Relationships: Everything's connected

*"When we try to pick out anything by itself, we find it hitched to everything else in the Universe."
-John Muir*



Discover how everything in nature is connected

Although this brochure will not guide you to specific locations, it will tell you a story to help you discover some of the relationships found along the trail. Use the pictures and text to try to locate as many of these relationships as you can. Have fun, and see how many different relationships you can find.

Guiding Pollinators

Many flowers depend on relationships with pollinators to reproduce. A flower's size, shape, color and smell attracts unique pollinators. Some flowers, such as the flowers of wood lilies, have nectar guides that are visible to insects through ultraviolet light. These guides act as road signs, directing pollinators to the flower's sweet nectar.



How many types of flowers can you find?



How many pollinators can you find?



Can you find a spider on its web?

Caught in the Web of Life

On their daily journeys to find food, many flying insects get caught in the web of life - the spider's web that is. A spider's web is not its home, but a trap for its food. Like snowflakes, each web a spider makes is different.



Can you spot a bird's nest in a tree?

Connecting Nature's Building Materials

Not only do many bird species eat spiders, some depend on their webs to build their homes. Many species of hummingbirds construct their nests by connecting spider webs and lichens. They use the sticky spider webs to weave materials together and to anchor their nests to the tree's branch. Spotting a hummingbirds' nest in a tree is tricky since they're about the size of a golf ball.



Find a lichen growing on a stick or rock.



Smell a wildflower.

Making Connections

We are an intricate part of nature's relationships. Our actions affect everything, from the bees that pollinate our flowers and food, to the soil we walk on as we hike through the forest. During your hike today, take the time to stop and smell a flower and...

Get Connected

I Lichen You!

Some fungi and algae "lichen" each other and help each other survive. In this relationship, the fungus protects the algae from adverse conditions; and in exchange, the algae provides the fungus with food. This is an example of mutual symbiosis (when two different organisms help each other survive).



How many types of mushrooms can you find?



Feel the sun beaming through the trees.

Open... Canopy!

During strong wind storms or cold winter ice storms, treetops often crash down to the forest floor, opening holes in the canopy. These holes allow more sunlight to reach plants on the ground, such as grasses and wildflowers. For some plants, the change is good... while for others it can spell their doom.



Can you spot trees with storm damage?

A Healthy Home

Mountain forests are home to a variety of plants that require different amounts of nutrients, water and sunlight. Each plant finds its preferred home among the slopes, valleys, peaks and streamsides. Sometimes though, even the perfect forest home can be suddenly changed by the weather.



Can you find a vista of a forest lake?



Can you find any mycelium?



Can you find a "turkey tail" fungi?

Fungi Feed Forests

Fungi help break down and decompose everything in the forest, from dead trees and fallen logs to leaf litter. After decomposing fallen logs and leaf litter, fungi feed the forest. Fungi have large, underground networks of "roots" called mycelium that attach themselves to the roots of plants and trees, helping to deliver valuable nutrients to the forest.