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## Online Extra

### Try Following an Ancient Pathway and See Where It Gets You

by Janet Webb Farnsworth

"This weekend you're going to get aboriginal," Tony Nester promises the six of us signed up for Grand Canyon Field Institute's Ancient Pathways class. I tried to act modest, but I knew I would be his star pupil.

Back in the 1830s, one of my grandfathers was a mountain man. Survival skills were in my blood. Besides, I taught Boy Scouts and raised six teenagers, both good training for aboriginal lifestyles.

Tony, with a bachelor's degree in anthropology, is originally from Michigan. He owns Ancient Pathways, LLC, and teaches classes in wilderness skills and mammal tracking for his own company and for other outdoor education programs such as Grand Canyon Field Institute. He says people take his classes to learn self-reliance, to teach outdoor groups and to recognize tools at archaeological sites. Photographer Bernadette Heath and I are there for one purpose—to save us from ourselves. Our ability to get in a bad situation is legendary around the *Arizona Highways* office, and we're hoping to stay out of the obituaries.

Tony, young and thin, looks competent enough to survive any situation. His students are quite a mix. Vera Vann is a schoolteacher from Las Vegas. At first, I wonder if she needs primitive skills to survive in a classroom, but I learn that she hikes and backpacks for fun. Steve and Katie Sullivan, a nice-looking young couple, like outdoor life. Steve works at the Grand Canyon National Park and Katie was a naturalist there. Our last class member is a nice white-haired woman who asks that we don't use her name and picture. She doesn't look like she's on the FBI's Ten Most Wanted List, so we decide she's pegged Bernadette and me as troublemakers and wants nothing to do with us.



I'm confident with my skills. After all, I spent 15 years teaching Boy Scouts how to burn marshmallows and make tinfoil dinners. My Scouting days are thankfully over, but I've retained enough skills to breeze through this class. Under Tony's orders, we dutifully tramp to the backyard of the Old Community Building on the Grand Canyon's South Rim to learn the oldest means of fire making, the hand drill method. Tony places a short wooden stick called a spindle on a wooden fireboard and twirls it with the palms of his

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**Yavapai Point at sunrise, Grand Canyon National Park.**

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**Tony Nester  
demonstrates the hand  
drill fire starter  
method.**

hands. A glowing coal appears in less than a minute.

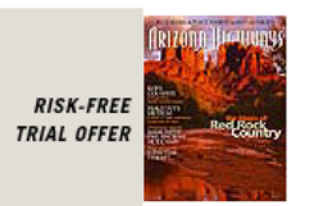
Now it's our turn. After 10 minutes, Katie has a blister, Vera claims her ribs hurt and Bernadette whines about tendonitis. Steve manages a few wisps of smoke, but I can't even muster up an excuse. I wonder what happened to my

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inherited skills. Of course, my grandfather was scalped on his first trip west, so maybe he didn't have enough skills to pass on and I'd better just carry a Bic lighter.

I rest my sore palms and make a tinder bundle, a bird nest looking creation of dry bark where I could put a hot coal if I ever get one. If Bernadette and I get into trouble, I'll make the tinder bundle and she can make the coal, but she just hoots at that idea and wipes the sweat off her forehead. She's hot, but her fire stick isn't.

Finally, Steve takes pity on me and uses another block of wood to apply pressure to the top of the spindle. I rub the spindle as fast as I can, then yell, "Fire, I've got fire!" I'm quickly hushed up. Park rangers sure get jumpy around here if you yell "fire."

Tony promises making fire with a bow drill is easier. "It's all in the mechanics," he says, and I groan. Coordination isn't my long suit. I watch as Tony places the spindle in the string of his bow, turns the bow sideways and then positions the spindle on the fireboard. Next, he puts his foot on the fireboard to hold it firm, and then using the bow he saws back and forth, turning the spindle. In less than 30 seconds, he has a nice little plume of smoke. When I try it, the spindle careens out of the bow like an arrow. Bernadette soon is getting smoke from her exertions, but I smell burning rubber. Yup, it's Bernadette. She's put her foot too close to the spindle, caught the sole of her tennis shoe on fire and is now hopping around in the dirt trying to stamp out her smoldering shoe.

Tony wisely decides to move onto the next lesson—napping. I'm ready for this skill until Tony says that's knapping with a "k," like in flintknapping, the art of making stone tools. In the center of a tarp are some copper tools, antlers, obsidian and black rhyolite. I carefully watch as Tony selects a stone and with some quick practiced magic turns it into a serrated edged knife blade.

We sit in our circle and chip away. I'm actually surprised at how well I'm doing until my spearhead breaks in half. Not discouraged, I discard one piece and go for an arrowhead instead, but it breaks, too. I finally finish with a somewhat crude arrowhead large enough to hunt a sparrow or a mouse. I wonder how many of those tiny arrowheads in museums started out to

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Yavapai Point at sunrise, Grand Canyon National Park.

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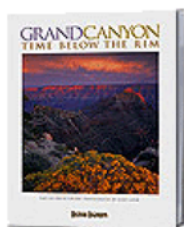
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be spearheads.

I'm getting the hang of this flintknapping and fashion a rhyolite awl sharp enough to bore a hole in a yucca stalk. Of course, it won't

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replace a Black & Decker drill, but I'm proud. The group is impressed until Bernadette blurts out the rock was already shaped that way and I just sharpened it.



The group uses pinesap and crushed charcoal to make pitch sticks.

Bernadette shows off her skills when we make pinesap glue. One ingredient is powdered charcoal, and Tony assigns Bernadette as the chief charcoal crusher, a job requiring few skills and no brains. Sitting on the ground with a rabbit skin in front of her, she smashes chunks of charcoal with a rock, creating a black powder that settles on her face, hands and clothes.

We mix pinesap and Bernadette's charcoal to make pitch sticks used to attach arrowheads or repair a bow. Something along the line of a glue stick that doubles as a Band-Aid, candle or bug repellent.

We can't camp in the forest, but that doesn't keep Tony from taking us there to construct a wickiup shelter and a pine bed. We scrounge up a scraggly assortment of dead limbs, and by propping and layering we construct a small three-sided teepee, and then cover it with pine needles, bark, a few ants and a spider. It resembles a trash pile with a hole burrowed in it. It's not even big enough to stretch out in, and 6-foot Steve is downright cramped, but Bernadette wants to spend the night in it. Not me, I'm glad we're staying in a motel with clean sheets and a hot shower.



Steve Sullivan tries out a pine needle bed.

Our next project requires armloads of pine needles. Building the outline of a bed with leftover limbs from the wickiup, we fill it with pine needles, and then scoop out an area to lie in. We each get a chance to try out the bed, and I admit, once you move a few sharp sticks and toss out a pinecone or two, it's not half-bad. As I watch the others take their turn, I realize they look like they are stretched out in a coffin and suggest maybe we're dead tired.

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Yavapai Point at sunrise,  
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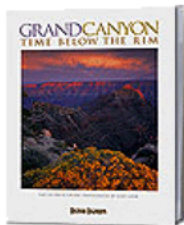
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But, Tony isn't through with us yet. We learn to make fishnet out of string, but since there's not many fish around, I use the fishnet to make a carrier for my water bottle. Good Scout that I am, I follow directions and make a simple one, but Bernadette weaves an elaborate macrame strap for hers. Tony fears his survival training is turning into an arts-and-crafts fair and calls it quits for the day.

Early next morning we are out on the Rim Trail making rope out of yucca leaves. The Grand Canyon is especially pretty in the

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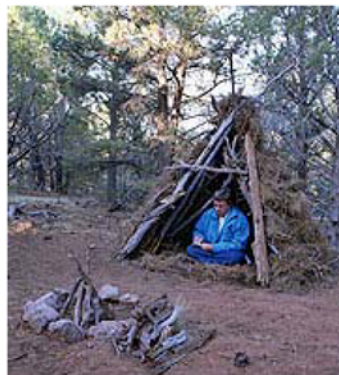
morning, and it never fails to awe me. As sunlight softens the shadows and chases them deeper into the chasm, layers of rock formations light up in one of nature's best shows.

Tony has brought pointed yucca leaves from a plant in his front yard, each about 1 foot long and 2 inches wide. He says, "Yucca and agave were the staples of the desert. The lives of the early peoples were literally woven together with fibers from these plants."

We scrape off the outer pulp then beat the leaf with a wooden stick to loosen the fibers. Sitting right along the trail on the edge of the Canyon, we become major tourist attractions. Some curious Japanese visitors try to overcome a language barrier and figure out what we are doing. Finally, they give up and take pictures of the Arizona aboriginals to show their friends back home.

As we separate the fibers and start our ropes, we sit companionably under the shade of a piñon tree. Early life must have been like this, people enjoying each other and the scenery while they construct the necessities of life. I'm getting to feel some of that aboriginal Tony keeps talking about.

We've advanced enough now to make weapons, a spear and atlatl. Tony explains that the atlatl, a short, notched stick, will help us throw the spear farther. Prehistoric people in the Southwest actually killed mammoths with these two tools. I peel the bark off a 6-foot shaft for my spear, sharpen the point and tie two turkey feathers on back. Unfortunately, the feathers are on backward. I try again only to have both feathers on the same side. The third try is the charm, and I'm ready for action.



At the Grand Canyon Elementary School playing field, we try our hand at spear throwing. Steve's goes pretty far, even though it wiggles crookedly, but the rest of us only throw it about 20 feet. I mistakenly throw my atlatl along with the spear, and it goes nearly as far as my spear. But after a few practice shots we're making passable throws. Bring on a herd of mammoths; we're ready for

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Yavapai Point at sunrise,  
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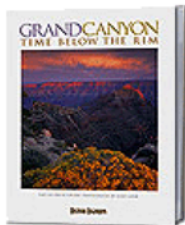
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Our author enjoys early morning quiet time in a wickiup shelter.      them.

For our final event, Tony brings out throwing sticks. He says, "Next to rocks, these were one of the first weapons." They are not fancy, just a limb of a tree about a foot long. Tony lines up some plastic soda bottles for targets and, to my amazement, my stick comes closest to the target. Then I realize what that means. My true skills are on par with the caveman. I don't know if it's genetic or one too many Boy Scouts, but I've regressed. I belong to the Neanderthal Era.

### When You Go

**Location:** Grand Canyon South Rim, 75 miles north of Flagstaff.

**Getting There:** From Flagstaff, take U.S. Route 180 north to State Route 64. Turn right onto SR 64 and proceed to entrance.

**Additional Information:** Grand Canyon Field Institute, (928) 638-2485; [www.grandcanyon.org/fieldinstitute/](http://www.grandcanyon.org/fieldinstitute/); Ancient Pathways, LLC, (928) 774-7522; [www.apathways.com](http://www.apathways.com)

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