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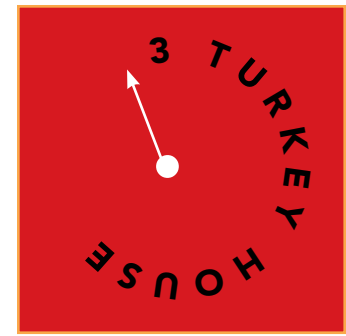
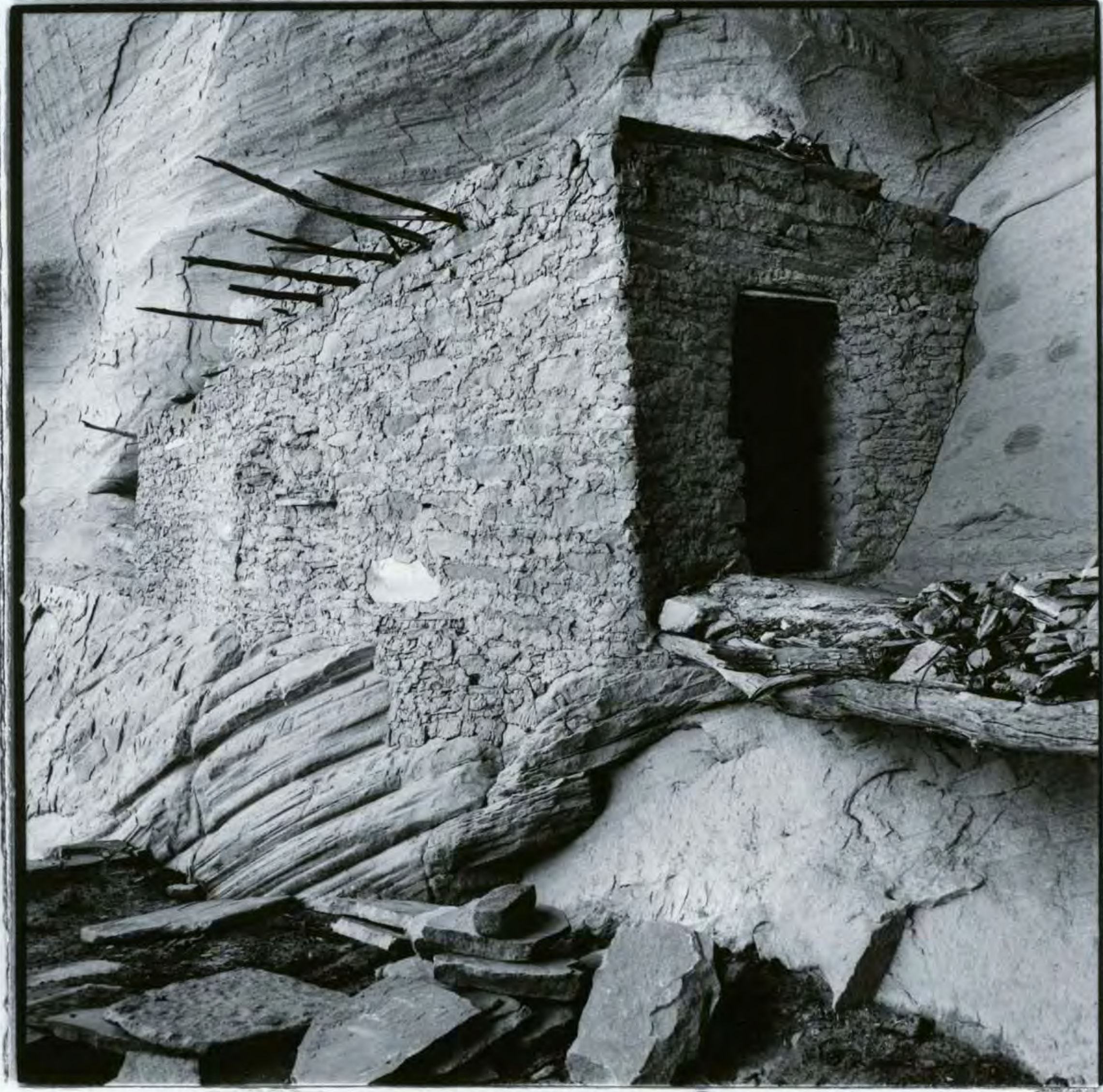
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WINTER/SPRING 2012: TIME



Scott Thybony

Sometimes the smallest detail can connect you directly with the past. It might be a long strand of black hair exposed by blowing softly on the dust of an ancestral Puebloan ruin. It might be a single turquoise bead on a red ant hill or a fingerprint preserved in the plaster of an ancient masonry wall. At Three Turkey House it was a stone slab edging the rooftop entry of a perfect kiva.

The ceremonial chamber, built into a block of masonry, occupied the uppermost section of a prehistoric village perched high on a canyon wall. Cliffs flaring overhead had sheltered the kiva so well not a stone was out of place. The rooftop opening, used both as a smokehole and entryway into the kiva, was faced with a single piece of sandstone split in half. The long sections were set on opposite sides of the opening as mirror images of each other, creating a balanced, aesthetic effect. Those climbing the kiva ladder would have placed a hand on each stone to steady themselves. Oils from many human hands had polished the slabs to a soft luster, darkening the sandstone. Suddenly the past was a tangible presence. I was no longer separated in time from those who had made their home here centuries ago.

Before our climb into the cliff house, tribal archaeologist Roger Henderson and I had been attending a Nightway ceremony. The hours of chanting, the heat and darkness of a sweat lodge, and the steady drumming had taken its effect. *After two days the flow of time had begun to eddy, to curl back on itself like the current in a river.* I had settled into a different rhythm grounded in this particular landscape, the Navajo country between Window Rock and Canyon de Chelly, Arizona. Call it the rez effect, or maybe it was simply a lack of sleep.

Returning to Roger’s wood-paneled trailer after the night’s events, we had grabbed only a few hours of rest. The trailer, designed like a ship’s galley, gave him mobility—he could hitch it up and be gone in twenty minutes if needed. Roger put a kettle on the stove and tuned in a local station, enjoying the circumstances he found himself in. “A ’54 trailer and goat-roping music on the radio,” he said. “It’s the Twilight Zone—the f__ing Twilight Zone!”



All biological clocks are adaptations to life on a rotating planet. — COLIN PITTENDRIGH



Top: David Hamaker; bottom: Chris Conrad
Facing: Flying owl, Elena Miras; crescent moon,
Viktar Malyschys/Bigstock

Greer Chesher



crawls, walks, creeps, swims...

Time flies like an arrow; fruit flies like a banana.

—GROUCHO MARX

ROCKVILLE, UTAH. Six o'clock AM. From the treed fence line a rufous-sided towhee *drinks tea*, a black-chinned hummingbird *buzzes* past my open door while a flycatcher *fitz-bews* from the clothesline accompanied by myriad miscellaneous chirpings, tweets, and twittered discussions repeatedly punctuated by a mourning dove's rocking-chair *coo*.

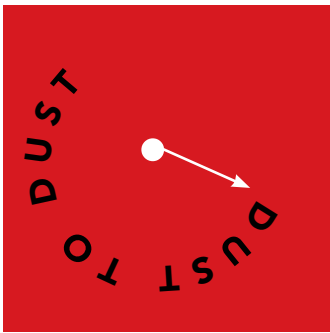
I am a stranger in a strange land. Three hours hence, when usually I claw myself into waking consciousness and struggle to attain verticality, though the sun is high the soundscape is less bright, filled instead with the mundane: cattle bray like the dinosaurs they replace, hungry horses whinny, cats meow for breakfast. Lately, a new sound has

joined the mid-day chorus: a fledgling redbird keens for mother from cliffside soarings meaning, to me, it's mid-July. Soon, flocking scrub jays will caw September's arrival and then, none too soon, mountain bluebirds will flit branch to "bobwyre" foreshadowing spring's return.

Animals tell us what time it is; but how do *they* tell time?

The answer is not what you might think. It's not that early birds enjoy rising with the sun, or that I, with my night-owl tendencies, simply prefer the night; in part, it's *genetic*. All of us—early-morning singers, late night scholars, butterflies in migration, noisy spring toads, and tortoises in summer slumber—are programmed in each and every cell of our bodies.

Not only that. Most timed behavior is not *in response to*, but *in anticipation of* an event. Those birds singing



Don Lago

I shall give myself to the desert again.
—MAYNARD DIXON

It is a place where earth becomes art, where rock becomes beauty, where tectonic motion becomes emotion. It is a place where the forces that tear rock apart have actually built something, something that, when it meets the order-making forces of the human mind, becomes something more.

Sandstone cliffs rise perhaps two thousand feet high, cliffs full of curves and crests, spires and knobs, alcoves and canyons. The cliffs are as red as if a million years of sunsets had baked their glow deep into the rock, but in reality the redness has emerged from within the rock itself, from iron that long ago painted volcano plumes and the blood of dinosaurs. The red cliffs are streaked now with the black of desert varnish and waterfall tracks, and dotted with the green of trees growing out of implausible ledges and crevices.

You might think you were in Zion National Park. In reality, these cliffs are about a dozen miles outside the park—perhaps the most Zion-like zone of cliffs outside of Zion. It would be a great home site for someone who loves Zion. The cliffs would greet you in the morning, frame your thoughts and moods, season your meals; and because the cliffs face west, they offer the full glory of the sunsets. If you were an artist, the cliffs would become your teacher, and you the canvas of the genius light.

I was visiting the home of Maynard Dixon, who after a third of a century of exploring and painting the desert Southwest had chosen this spot in which to live and paint. Here in 1939, Dixon commissioned a log-and-stone house where he often spent half the year until his death in 1946. His house overlooks a long, deep, north-south valley carved by the East Fork of the Virgin River; the same waters that still flow toward Zion National Park to carve Zion’s canyons still deeper. The Zion-like cliffs to the east have been carved by the same fluvial hand that carved Zion itself. The river fills the valley with cottonwood trees, which add to the red-rock view a thick stratum of green, and in fall, brilliant yellow. And then there is the sky, the sky that often filled more than half of Dixon’s canvasses, because the sky is not empty but full of space and color and upwelling clouds and curving streaks of rain.

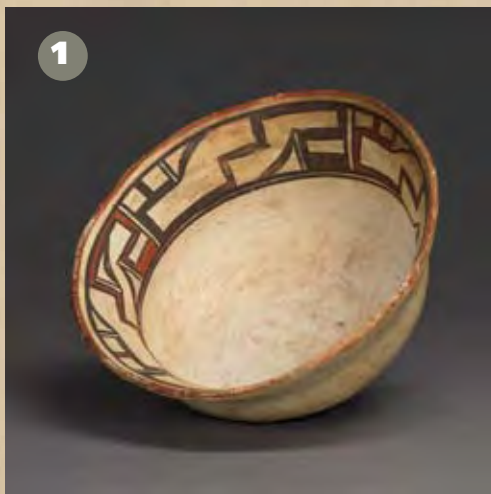


Maynard Dixon in Taos, New Mexico, 1931. Photographed by Dorothea Lange. Collection of Lolita and John Dixon

Facing: MAYNARD DIXON, *Cliffs of Zion*, 1940; oil on board, 20 x 16 inches; collection of Paul and Janet Doxey



All things physical, modest and grand, natural and human-made, animate and inanimate, begin and end in time, whether measured in heartbeats or millennia. The drama of age is uniquely visible on the Colorado Plateau.



POLACCA BOWL, 1840S



POLACCA JAR, 1860S



POLACCA BOWL, CA. 1890

- 1 A WATCHED POT IS A CLOCK** Art historians read Pueblo pottery like clocks, noticing the shapes of vessels, the types of slip (a sort of clay soup) applied to their surfaces, the organic and mineral pigments that emerge as colors from the heat of the fire, patterns of change in the designs that complement the whole, and many other things. All reflect cultural identity across time.
- 2 THE AGE OF WATER** The Colorado River is born as rain on the dry flanks of the Rockies and ends its life in the Gulf of California. In a truer sense, it is as old as Earth. Molecules of the river may have been sipped by dinosaurs and kings, fed the gardens of Medieval monasteries, or danced in the bodies of ballerinas.
- 3 A 50,000-YEAR-OLD HOLE IN THE GROUND** *Pow!* Meteor Crater formed when a massive chunk of hot rock smacked the planet some 50,000 years ago.

Pottery vessels shown courtesy of the Allan Cooke Collection

Meteor Crater: Photo by Michael Collier

Rushing water: velvetjam/Bigstock



You step backwards and the cliff edge crumbles under your boot. You hear the rattling and look across the tent at the coiled snake. You think you're still on the right trail until suddenly you realize you've passed this same juniper twice. On the Colorado Plateau, as elsewhere, time and event entwine in percussive experience. Even as your heartrate accelerates, the seconds seem to pass more slowly. Neuroscientist David Eagleman experienced this phenomenon as a boy during an accidental fall. Years later he returned to that memory in an attempt to understand how the brain reflects—and creates—the dimension we call time.



David M. Eagleman

At some point, the Mongol military leader Kublai Khan (1215–94) realized that his empire had grown so vast that he would never be able to see what it contained. To remedy this, he commissioned emissaries to travel to the empire's distant reaches and convey back news of what he owned. Since his messengers returned with information from different distances and traveled at different rates (depending on weather, conflicts, and their fitness), the messages arrived at different times. Although no historians have addressed this issue, I imagine that the Great Khan was constantly forced to solve the same problem a human brain has to solve: What events in the empire occurred in which order?

Your brain, after all, is encased in darkness and silence in the vault of the skull. Its only contact with the outside world is via the electrical signals exiting and entering along the super-highways of nerve bundles. Because different types of sensory information (hearing, seeing, touch, and so on) are processed at different speeds by different neural architectures,

Fishing: Photo by Elena Miras
Facing: Wave hit in Crystal Rapid, on the Colorado River in Grand Canyon National Park, Arizona: Photo by Kerrick James
Overleaf: Hummingbird. Photo by Elena Miras



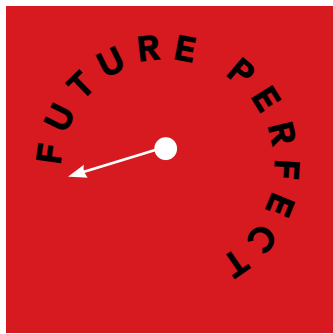
Left to right: Sade Demery, Christopher Jackson, May Tran, Robyn Whitted, Ted Conway. Photos by Larry Novak, courtesy of the Association of Partners for Public Lands

Across the public lands of America, a new generation is inspired to take up the joys and challenges of wildland stewardship.

Larry Novak

May Tran, the petite twenty-something Urban Ecology Educator at the Crissy Field Center in San Francisco, stood ramrod straight, pointing a Flip video recorder at Jarid Manos, a tough-looking former drug dealer who is the founder of the Great Plains Restoration Council. She is in Dallas, interviewing him on assignment as a participant in the Bridge to Tomorrow program sponsored by the Association of Partners for Public Lands (APPL). APPL brought her and six other participants in this program to its 2011 convention to take part in four days of workshops, seminars, and breakout sessions designed to mentor future leaders of public lands.

Bridge to Tomorrow is one of a number of programs sponsored by public land agencies, “friends” groups, or cooperating associations that help attract and mentor



young people interested in a career in public lands. APPL’s program, designed for people between the ages of eighteen and thirty, is now in its fourth year. It is targeted toward young professionals already working at public land sites and

college students thinking about such careers.

A number of organizations within the Peaks, Plateaus and Canyons Association (PPCA) are members of APPL, an umbrella nonprofit organization for groups and associations that work in tandem with parks and other public lands.

✦ The next time you visit one of the public lands, consider the ages of the people working there. How young are they? Do you see the next generation of public land stewards or do you see the next generation of retirees?

Some worry about who will take care of our public lands when we are gone, and this is one of the reasons for the Bridge to Tomorrow program. In 2009, when planning its Baltimore convention, APPL noticed that one of the keynote speakers, Iantha Gantt-Wright, had

previously helped coordinate a young leaders’ summit in South Carolina. They asked her to coordinate another summit at the APPL convention to help advance the goals of diversity and generational inclusiveness. Participants were local Baltimore-area youth, many of whom had some prior connection to the Student Conservation Association (SCA), the largest volunteer conservation organization in the country. The group met on a Sunday prior to the start of the convention to learn about APPL and its member organizations and to share their ideas on ways to further involve young people. Because of school schedules, only a few were able to return during the convention to attend the keynote address, but some 400 convention attendees enthusiastically listened to their comments.

✦ There is plenty of anecdotal evidence that people do not become passionate about stewardship of public lands without early exposure of some sort to the outdoors. It used to be as simple as walking out the back door and into the wilds to play, but the ability to do this is becoming less possible for many reasons. Fewer children live near the wilds and, even if they do, parents are less likely to allow them to go there.

Richard Louv, in his book *Last Child in the Woods*, describes a phenomenon he calls “nature deficit disorder,” caused by lack of exposure to the outdoors. Television, the Internet, electronic games, urbanization, even increasing suburbanization, seem designed to keep children indoors

and away from unstructured play time in the outdoors. When they are playing outside, it is often within the confines of a structured team sport—carpool to the game, play the game, go for pizza, and back to the comforts of home.

Despite this gloomy assessment there are plenty of reasons to be encouraged. There are programs available to get children out of the house and into our public lands—it’s not just Boy Scouts and Girl Scouts any more. The members of Peaks, Plateaus, and Canyons Association and the public land agencies they support operate many of these programs. Mike Buchheit, director of the Grand Canyon Field Institute, is optimistic. He says, “Most recently I taught photography to more than a dozen teenagers on an art-based river trip through the canyon; if these kids are any indication, things may actually improve under their watch.”

The National Park Service offers the hugely popular Junior Ranger Program at over 220 of its sites. Sandy Grove, education specialist at Mesa Verde National Park, says that many young people participate in their Junior Ranger activities. At the park, potential Junior Rangers get a booklet with a number of activities divided by age group. After completing at least three of the activities and answering some questions, they can get a Mesa Verde Junior Ranger badge. Prominent in the list of activities is one called “Becoming a Steward.” This prompted one parent’s comment, “Stewardship for the natural world is