DEPARTMENT OF FUTURE REGRETS
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Camas Magazine cultivates a community of writers and artists dedicated to promoting ecological and cultural diversity and resilience in the American West.

OUR TITLE Camas takes its name from the plant *Camassia quamash*, which is native to the American West and has historically been used as a staple food and medicine for local indigenous communities. The practice of harvesting camas continues a longstanding, reciprocal relationship between land and people.

OUR HISTORY Founded by Environmental Studies graduate students at The University of Montana in 1992, Camas provides an opportunity for students, emerging writers, and established authors to publish their work alongside each other.

OUR FRIENDS Camas received support for this issue from the Associated Students of The University of Montana, the Clark Fork Coalition, the Wild Rockies Field Institute, the Missoula Writing Collaborative, Northwest Connections, the University of Montana Environmental Studies Program, and donors.
Spring has us thinking of revolutions. Social movements. Political upheavals. Stellar orbits. Cycles, circumvolutions, circumnavigations. Trajectories and returns, travels and transformations. Revolution is evident now in the change of season, the shift in leadership, the evolution of collective awareness. In the American West, revolution is all around us.

In this issue, Sharman Apt Russell illustrates the tandem transformation of science and self with an excerpt from her newest book *Diary of a Citizen Scientist*, winner of the 2016 John Burroughs Medal for Distinguished Nature Writing. Peter Gurche offers a meditation on soils turned slowly by tills dragged behind draft horses, a revolution against the industrial and mechanical. Taylor Hopkins contemplates the enormity of disappearance. Walter Savage’s centerfold art pieces summon our inner monkey-wrenchers, the subversive and brilliant parts of our minds that crave rebellion against the corrupt and connection with the primal, ancient, or untamed. And Nick Triolo takes us across the Atlantic and back in a seminal exploration of protest, acceptance, obligation, and priorities.

Images from some of the West’s most talented photographers lead us toward a better understanding of the complexity and intricacy of revolution. In this issue we are proud to share a collection of some of the most compelling art ever to be featured in Camas, each piece a testament to the diversity in interpretation of the theme.

The work on these pages illuminates permutations of revolution we didn’t think possible. With the West as our axis, we invite you to see where these narratives and images lead you: inward, beyond boundaries, or toward something revolutionary.

Lauren and Chandra
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PHILLIP AIJIAN

“There are no unsacred places / there are only sacred places / and desecrated places.”
- Wendell Berry

From newt gulch and trout river, from glens of indigenous eucalyptus I came. I pled their causes to the gods of diesel and asphalt, men with maps and scissors, hands with golden shovels. But their machines did not listen and swept me away. I alone survive the marsh and meadow; the golden finch whose eggs grew thin beyond cracking. I left when there was too little worth saving; my hands too scarred and voice too hoarse, my blood too weary an atonement for the sacrilege.

Most of us come from the public sector, where our requests and names were ignored. The Department of Future Regrets recruits only those most cynical, our senses whittled to tunnel vision, a locked jaw, the brief sigh. I have a pet stormcloud who barks a little thunder and follows me everywhere, keeping me in the shadow to which I’ve become accustomed. Someone, somewhere. is our motto, our creed. We place our faith in sin and greed, and are not disappointed. We count on catastrophe and are not surprised.

Our pockets run deep, coffers coined from the same purse as the Department of Defense, numbers soon to be reckoned as bloodmoney. Our founder was a carpenter—a man whose chisel could coax rocking chairs and filigree out of mahogany. But bad luck obliged living in a town so violent they could not wait for the coroner, and measured the living. Puritan guilt caught up when coffins had built the second nicest home in the county. When he was 32 he bought the first field, fallow beyond the regard of a tumbleweed with a well crumbling at the north corner, choked on dusty coins and bloody buckshot. He bought others and in each buried a silver dollar.

His will declares the terms of the despair we are heir to. We buy land and set it apart as future tribute, prophetic memorial, offering for offenses uncommitted. For wrongs will be denied and judges will be bribed. Ancient forests will be razed to supply a tycoon with toothpicks. Senators will conspire and retire into the repose of their contractually obliged Alzheimer’s.

The letters long hidden will at last be read only for the words to crumble in trembling hands. Blessed is the man who may go to a place and weep when his fingers brush over the dull bronze letters of a familiar name. Blessed is the man who may limp to a monument when he is old; when he has dreamed the dreams that wake him with a cry, with a casting away of the phantom weapon clutched by his younger, cleaner hands. But how few these fortunate ones. How many more have tried to build cairns to their cares and were brushed away into the open grave of another man’s apathy. Vengeance belongs to the Lord, but mourning belongs to us.

We set aside a field for the next martyr whose voice will be cut short in the midst of blessing. We quarry sheets of granite to echo the unconsoled pulses of weeping to those who will be too cowardly to speak when yet he lives, whose streets will not be washed of his blood. We prepare a plot upon which shall stand dozens of glass panes, their presence nearly invisible, so that each footprint, every tooth of gravel
or eddy of wind that whispers across the loam will be revealed—hidden only in the night, God’s shadow. These will stand for the soon to be nameless soldier whose obedience shall be so total, no acknowledgement but a folded flag and bugle’s lament shall be offered. This place and another when a wall in Langley has been filled with stars, not one shining.

To me, now, falls the lot of dreaming of how to commemorate the Mississippi, when our thirst has drained the delta; when a mother shall name her son Noah, and pray for floods. When that riverbed has become a highway, when the Rio Grande is a valley of bones, let son and mother wander into the desert to find waters we will set beyond all quenching. Waves of steel will arise, each one a mountain, adamantine icon for a gone people who could drink, who could be washed clean; who are no longer among us. I draw the wave crests sharp. I draw their shadows like curl lines to the horizon. And, on a whim, I scatter a handful of V’s, as every boy knows to draw a flock of birds.
Muddying the Line

PHOTOGRAPHS AND WORDS BY SER ANDERSON

A few days later, I will bike over the Higgins Street Bridge and a handful of pigeons will swirl over the red marquee of the Wilma Theater. I will watch them wheeling against the gray sky. And I will feel something unexpected, a corresponding swirl of awe. I will remember how I have looked down into the plucked carcass of one of those birds, met the fierce light in the eyes of its killer as it peered down from the bare branches of a Norway maple. That is what merlins are made of, I will think.

I will find myself hoping to be like pigeons, muddying the line between either/or, warm in the belly of a merlin and head bobbing in the city streets after food scraps, human and wild, both offering possibilities for a more open embrace of the world as it is, beyond all the words we try to use to pin it down, as ugly and as beautiful—simultaneously—as we have eyes to see.
Confessions of a Citizen Scientist

SHARMAN APT RUSSELL

I have always wanted to be a field biologist. I imagine Zen-like moments watching a leaf, hours and days that pass like a dream, sun-kissed, plant-besotted. I imagine, like so many others before me, a kind of rapture in nature and loss of ego. John Burroughs, an early American naturalist, wrote that he went to the woods “to be soothed and healed, and to have my senses put in tune.” In my own walks through the rural West, this echoes my experience exactly. I enlarge in nature. I calm down. The beauty of the world is a tangible solace—that such harmony exists, such elegance, the changing colors of sky, the lift and roll of land, a riverbank, and now a beetle flashing in the sun, an entrance into its perfect world. I am soothed, I am thrilled, and at the same time, eventually I get bored. Eventually I go home because my work (my writing, my students, my laundry) is elsewhere.

But what if that employment, my engagement with the world, was right there, in the largeness and calm of nature itself? “Blessed is the man,” Burroughs continued, “who has some congenial occupation in which he can put his whole heart, and which affords a complete outlet to all the forces there are in him.”

I have always wanted to be John Burroughs, and I have always wanted to be Jane Goodall, an early version of a citizen scientist who left her home in England—not even going to college first—to work as a secretary for anthropologist Louis Leakey and later to study chimpanzees in Tanzania. She lived in the forests of Gombe, her back against a tree, her toes rotting with fungus, beset by mosquitoes, watching and listening, entering the world of forest and animal—and always, always taking notes, desiring and finding and then opening “a window” into the mind of another species, one not “misted over by the breath of our finite humanity.”

Sometimes in the middle of the street, in the middle of my life as a teacher and writer and wife and mother in southwestern New Mexico, I have stopped to wonder: Why didn’t I do that? Why didn’t I go to Africa? It’s a sorrow. My heart actually feels pierced. Where is my window into the unknown, the nonhuman? And where is my competence? My expertise? My forest? Why am I inside so much of the day?

Ten years ago, I first began thinking about citizen science when talking with entomologist, Dick Vane-Wright, the Keeper of Entomology at the London Museum of Natural History, whom I was interviewing about butterflies. “There’s so much we don’t know!” Dick told me, sounding excited and distressed at the same time. “You could spend a week studying some obscure insect and you would then know more than anyone else on the planet. Our ignorance is profound.”

Nodding, I wrote the comment down in my notebook. I liked its humility—an acceptance of how little we know—and I liked its challenge and implied sense of wonder—there is still so much to discover. Over the next decade, the words would surface again, like some message on a Magic Eight Ball: Signs point to yes. Concentrate and ask again. You could spend a week studying some obscure insect and you would then know more than anyone else on the planet.

I’ve spent a lot of time in my life, much more
than a week, thinking about how terrible things are on the planet: how polluted, how crowded, how damaged and diminished. In my circle of friends, the apocalypse is party conversation. Dead zones in the ocean. Melting ice caps. Then there are the changing patterns in our own weather—that unusually dry winter followed by a dry spring. Global warming is local, with most of the Southwest in the highest category of drought, one expected to persist and intensify. As the world falls apart, as we lose hundreds of species a day in the most current mass extinction, as I lift my head to the bright blue New Mexican sky and lament and wail and ululate … the idea that there is still so much to discover strikes me as a kind of miracle. We think we’ve beaten the Earth flat, hammered
out the creases, starched the collar, hung her up to dry. We’ve turned the planet into our private estate, a garden here, a junkyard there, maybe an apocalypse at the end. But no longer wild, no longer mysterious. And yet. You could spend a week studying some obscure insect and you would then know more than anyone else on the planet. It’s such a cheerful thought.

On the bank of a river in southwestern New Mexico, I use close-focusing binoculars to watch a female Western red-bellied tiger beetle. Her coloring is distinct: brown wing covers patterned with seven creamy irregular dots, abdomen orange, head and thorax iridescent in the sun. Her mouthparts are large and sickle-shaped, her eyes also large and prominent. She is nine millimeters long, a dot on the Earth—but…how to say this? a really intense dot, carnivorous, alert, fast, fully centered in her life, this moment in the sun.

Maybe the world is already in love, giving me these gifts all the time, calling out all the time: take this. And this. And this. Don’t turn away.

Like humans, tiger beetles can be found all over the world. All tiger beetles share some characteristics. Their larvae are pale white grubs with a dark armored head, heavy mandibles, and up to six eyes. After hatching from tiny eggs (2–4 millimeters) typically laid into soil, the tiny larvae use their tiny jaws to dig a narrow tunnel, the head acting as a shovel. On the larvae’s lower back, two pairs of hooks anchor them into the side of that tunnel—allowing the grubs to lunge out like B-movie monsters and drag in insects even smaller than themselves. Later, the indigestible parts are carried up and thrown from the burrow’s mouth. Over months or a year or two years—quiescent in their burrows, dormant in winter—these larvae go through three stages or instars, eating and growing larger and shedding their skins, each time digging the tunnel wider and deeper to accommodate their new size. Finally, the last stage forms the pupae from which the adult beetles emerge.

Some twenty-six hundred species of tiger beetles have been described so far, and for most of these, the descriptions are incomplete. Where, for example, does the female Western red-bellied tiger beetle lay her eggs? And after the eggs hatch, what do the larvae look like exactly? My citizen science project involved answering these questions, filling in this blank spot on the world map of tiger beetles.

I know the beetle I am watching today is female because of the slightly smaller male riding her back. Likely, this male is trying to be the last to introduce his sperm into her sperm storage compartment. Instead of eating, instead of watching for things that might eat him, he holds on. Now a second male tiger beetle approaches the pair, perhaps to disengage the first. And then from somewhere the music rises and crescendos as a giant, warty, oval, gravel-colored toad bug—

known for grabbing its prey with sturdy forelegs and sucking out their juices—attacks the second beetle, jumping on him and as quickly jumping off; for the toad bug and the tiger beetle are about the same size, and they are both predators with the mouthparts to prove it. The toad bug lumbers away, and the second male tiger beetle does a self-congratulatory pushup, although really he is only lifting up on his long legs to cool off, getting a fraction farther away from the hot ground.

The summer theater of insects is more a three-ring circus than a stage presentation, and nearby a large pack of tiger beetles are swarming and stabbing a dead frog. This is in full accord with my Field Guide to the Tiger Beetles of the United States and Canada, which notes, “As water sources dry up and tadpoles, insect pupae, and other aquatic organisms become exposed,
hundreds of Western red-bellied tiger beetles will attack these large but helpless organisms.’’

Attacking a large helpless organism is high on any tiger beetle’s list. But more often these insects are hunters, not scavengers, the adults running down an ant or spider, grabbing the victim, slicing, dicing, drenching its body with digestive juices, and then sucking up the puree with a strawlike mouthpart. The Western red-bellied beetle can also fly short distances, and I am reminded that this river bank contains many more tiger beetles than the group I am watching. The area swarms with predacious beetles, just as the guidebook promised. Putting down my binoculars, I can see them on the mud at the water’s edge. I can see them in the grass and in the sedges. I can see them everywhere in my peripheral vision, and I think of piranhas and certain horror movies I watched as a child. It’s silly to be at all nervous. Even so, I look quickly at my feet.

The biologist in charge of my collector’s permit has left me a can of bear spray. The wildlife refuge has some “problem bears” in the area, as well as “problem mountain lions,” and that’s where the biologist is at the moment—trying to radio-collar a mountain lion. The volunteer at the visitor center explains how to use the spray, although I can’t imagine having the wherewithal to fumble in my backpack (I’ve had wrestling matches with my purse that border on domestic violence), get out the can, unlatch the lever, and aim for the eyes. But I listen politely. Cock here. Pull back. Later you can use the bear as a flotation device.

There is a way to approach a Southwestern river that resembles birth—a dark tunnel-like passage through willow and brush and then emergence into light and water and sun striking water and more light, light falling on light falling on light. The Rio Grande is wide, a hundred feet across, stripes of brown mud and white sand separated by braided streams. The other side of the river, another stripe of salt cedar and willow, seems very far away.

I step from the eroded bank into a channel that runs fast, ankle- and suddenly thigh-deep. Whoa! Wet! Keep the GPS dry! I am stumbling, falling, before lurching upward onto sand again. Sun and light and my shoes, socks, legs, and shorts filmed with a coating of the muddy water of the Rio Grande where I nearly got to wash my face and hair, too.

I must stop for a moment—just to collect myself.

Then I put down my pack with its glass vials and guidebook and water and sandwich and bear spray wedged at the bottom, and take out my collector’s net with its elegant long expandable handle. I swing the net just a bit, like a flag waving.

In the terrariums, males ride females for hours, with the lone males circling for advantage. One male is strikingly aggressive, more than the other unattached males, more than any tiger beetle I’ve ever seen. He grabs another male who is on top a female. The second male is firmly lodged, but the attacker doesn’t give up, scrabbling and biting until I’m alarmed. That insects have individual traits is an observable fact, although one we do not often notice. Certainly we see differences among butterfly species, with some demonstrating longer memories when we set them to certain tasks—and within those species, some butterflies doing better than others.

Now two other tiger beetles in this terrarium are throwing themselves down and flailing their legs—my god! I think, they’re having a seizure!—and then picking themselves up, calming themselves, so to speak, pretending that nothing strange just happened.

Perhaps this is grooming behavior, rubbing off dirt or fungus, using the ground as a kind of towel. I’m curious but more focused on the burrow holes that are already opening up in the terrarium, tiny larvae waiting for me to feed them. Mamma. Momma. Mealworms. I decide to catch and release the extra males—back to the riverbank you go. All this drama is bad for my first instars.

I’m avoiding dissecting the female tiger beetles. Cutting into the ovaries of small insects …
it’s so hard to fit everything into the day.

Where an arroyo meets the dirt road, I stop and look for animal tracks. A few feet up the streambed are a nice set of bobcat prints. There’s no mistaking that roundness, the leading toe, the size of the front and back feet. I also see a fox print, or maybe a small coyote. Foxes are on my mind since I saw three earlier in the day, a mother and two kits, who ran so quickly into the brush I spent a few minutes questioning: was that a fox or a wish?

That’s one good thing about tracks. They stay there. You can admire them for long minutes, imagining the animal who passed by, feeling the tangible presence of a bobcat, short-tailed, tufted-ear, delicately-spotted, charismatic.

It’s another gift, the world showering us with gifts, the tail of a fox, tracks in the sand, and there—growing up the shadowed bank of this arroyo, a mound of jimson weed, also called moon flower, also called thorn apple, also called sacred datura, the large, creamy, lavender-tinted, trumpet-shaped blossoms seeming to glow, exuding power and a rich scent.

I feel the need to fall in love with the world, to forge that relationship ever more strongly. But maybe I don’t have to work so hard. I have
This is revolution in what citizen scientists bring to the table—our expectations as citizens that our data matters, our passions, and our spirituality—and this is transformation, becoming something new in your life, at any time in your life.

thought nature indifferent to humans, to one more human, but maybe the reverse is true. Maybe the world is already in love, giving me these gifts all the time, calling out all the time: take this. And this. And this. Don't turn away.

And here's my car, too, at the end of the road, the end of this field season, my second summer chasing tiger beetles. My daypack clatters with glass vials for the beetles I didn't find, and the sky is clattering and crashing above my head, a wild landscape of cumulonimbus, the thunderstorm gathering, rising and falling.

Requited love. I am the bride of the world, and I am the groom.

Around the world, citizen science projects are proliferating like the neural net in a prenatal brain. Over a million people have helped classify galaxies or cancer cells or whale songs for online projects on the website Zooniverse. More than a quarter million play the video game Foldit, synthesizing new proteins. Other citizen scientists like myself get up from the computer, go outside, and join a research team to study urban squirrels or phytoplankton or monarch butterflies. An estimated two hundred thousand volunteers work with the Cornell Lab of Ornithology tracking and monitoring birds. Many of us double as environmental activists, collecting air and water samples, documenting global warming and invasive species.

This is revolution in terms of how research is getting done, the ability to get a million people analyzing images and collecting data; and this is revolution in what kind of research is getting done, landscape-sized projects with information gathered across continents. This is revolution in how scientists are turning to non-scientists and seeing them as collaborators, breaking down barriers, leaping over age and education and economic and social status; and this is renaissance in how non-scientists are seeing their new role in science—in how a dentist becomes a lepidopterist or an accountant an astronomer. This is revolution in what citizen scientists bring to the table—our expectations as citizens that our data matters, our passions, and our spirituality—and this is transformation, becoming something new in your life, at any time in your life. Transforming yourself even as the field of science is being transformed.

You could spend a week studying some obscure insect and you would then know more than anyone else on the planet. Clearly I am a bit slow. For months at a time, I chased Western red-bellied tiger beetles, reared up their larvae, dissected their ovaries, and marveled at their tenacity and beauty. Often I was more grumpy and bored than sun-kissed and plant-besotted. Often I felt that I knew less about everything than anyone else on the planet. I felt profoundly humbled. And that was okay. This planet should humble us.

Sometimes, still, in the middle of the street, in the middle of my life in southwestern New Mexico, I experience that odd moment of separation: where is my window into the unknown, the nonhuman? Where is my competence, my expertise, my forest? Oh, and then I remind myself—it's all right here.

These excerpts have been adapted from Diary of a Citizen Scientist: Chasing Tiger Beetles and Other New Ways of Engaging the World (Oregon State University Press, 2014).
The Sign at City View Road and City View Boulevard

AMY MILLER

Here is the road I dreamed full of tractors. The carrots that fell off the truck, just there.

We picked them up later, their pocked skins slick and red with rain. Here is the rain, cauldrons of cloud,

our arms tingling with lightning as we waited on the lawn for a storm to the west
to dump its belly. There is the stable, now full of potatoes,

stone from the cold rebellion. And as for the sign, the neighbor screwed

with anyone not from this town and turned it ninety degrees

so they’d come back in their cars, puzzled, pointing, flapping their maps

while he watched from his front window, a Stanley steel mug of coffee

on the breakfast table he made from an old barn door.
Ploughed Under, Sprouting Back

PETER GURCHE

So steady, boys, walk on
Oor work is nearly done
Nor more we’ll till or plow the fields
The horse’s day is gone
An’ this will be your last trip home
So steady, boys, walk on.

-Davy Steele

I first heard the rich, Scotch brogue of that song when I was six years old. “I never thought I’d see the time when a Clydesdale’s work wid ever end…” lilted Davy and the Battlefield Band from the CD player. At the time, I didn’t know what a draft horse was, much less a Clydesdale. But somewhere in the resolving harmonies and the mournful twining of tin whistle and guitar lay an unmistakable sense of passing on, the end something graceful and good. Fourteen years later, when I stood nervous behind a Belgian gelding named Dandy in a field of spring garlic, that melody came drifting back. But it was far from our last trip home: Dandy and I had rows of garlic left to cultivate. If only Davy Steele could see us now, I thought. The wheel was coming back around.

Growing up in Spokane, I remember seeing coffee table books about Northwest draft horses in Auntie’s Bookstore down on Washington and Main: Plodding Princes of the Palouse, or Teamsters in Wheat Country. In sepia tones they showed eight, twenty-two, thirty-six horse teams pulling combines across the hills that sprawled on over the horizon just south of town. It was hard to imagine so many hooves working in concert, so many lines laid straight in the stubble. If I hadn’t seen the pictures, I wouldn’t have believed it. These days, come August, the diesel combines lurch out of their barns to crawl over the hills like ants after every last kernel of grain, their operators locked away from the dust and noise in air-conditioned boxes, sipping diet coke and listening to Brad Paisley. I once heard a young farmer who plowed his fields in the mountains of northern New Mexico with a team of mules call it “murder by machine.” And right there in the bookstore, looking as if they might just pull their spring-toothed harrows and riding discers right off the page and seventy years into the future, were the deceased: whole herds of Percherons and Shires, Gypsies, Brabants, and Halflingers, harnessed and hitched—wordless epitaphs for the long gone days of the working horse.

But not completely gone. Down on the south edge of the Palouse, in Walla Walla, Washington, Emily Deitzman and Andy Asmus farm a dozen acres of vegetables with horses. No colossal teams for them—a pair of blond Belgian horses serves Welcome Table Farm and keeps Emily and Andy plenty busy. At a small gathering of local farmers and students, someone asked Emily why she used horses instead of a tractor.

“Because I have a relationship with them,” she replied. “Because when I work in the fields I’m always interacting, always forced to funnel my full awareness into the way their ears are turned, the heaving in their sides, and the quivering in their flanks. Because it compacts the soil less. Because it’s quiet when I work. Because we can grow their fuel, and they give us back fertilizer. Because it’s cheaper than a machine. Because a team of horses only gets more valuable with age. Because it makes farming so rich.” Her answer quieted the room. “So few people think about the fact that all farming was done with draft animals not so long ago—mules, oxen, donkeys, water buffalo—and if they do think about it, they think we’ve upgraded, that draft power belongs with the telegraph and the cotton gin. But a whole complex world of relationship and interaction, full of quirks and magic, has been lost.”

I smiled to myself. Just a week before, I’d caught a glimpse of what she was talking about. I
Painted Horse on a Pale Desert KE'VIN BOWERS
was working a Wednesday morning at Welcome Table, washing beets and parsnips, when Andy called me over.

“Let’s harness Dandy—the old squash field needs to get harrowed.”

I had worked once with Dandy in that field of spring garlic, but then I had only been running the cultivator—a narrow set of hooks that cleared the weeds from between rows—while Emily held the reins. This time Andy was going to let me work the lines to guide Dandy across the field. We walked over to the barn where Dandy stood in his stall, his harness hanging on the wall beside him. I watched as Andy lifted piece by piece and laid it over Dandy’s broad back: first the collar and hames, then the market strap, back strap, soil at our feet loosened as we passed over, ready for next year’s planting. It was only a little taste of horse work, but it whet my tongue and filled up my dreams with the sound of unshod hooves stepping slow and heavy on the dark earth.

Emily and Andy aren’t the only ones whose lives still move to the tramp of a dray—there are other pockets, outposts of the past or islands of renewal, depending on your perspective. I found one in southwest France, a destitute hill farm that raised Percheron stock where I once spent a month mucking stalls and forking hay. The couple that ran it had almost no money, but could almost never bring themselves to sell their horses. “They’re like family,” they’d say as if in apology to their old barn and wood-fired range, and shrug.

I saw that these horses carried wild tales, old songs, poems and legends on their backs that bound people to a fading past and left them with small, tight balls of hope for the future.

checklines, and crupper. Then Andy lifted the bridle from its peg.

“Now, Dandy always takes the bit fine for Emily, but for some reason he thinks it’s funny to hold out on me.” He gave the bridle a little shake to straighten it, and held it to the horse’s face.

“Take that bit, Dandy,” he crooned. Dandy tossed his head and clenched his teeth. “I said take that bit, Dandy.” Nothing. “Take that bit!” Andy stuck his thumb between Dandy’s teeth, and with a reluctant quiver of his gums, Dandy let it slide to the back of his mouth where he chawed on it for a while just to show how irked he was, somehow seeming to grin at the same time. Andy backed him out of the stall, hitched up the harrow, and handed me the lines. It was my first time driving horses, and it was harder than Andy made it look—Dandy was sensitive to the slightest bit of tension, and turned when I hadn’t even realized I was sending him that message. But it was sweeter, too, and simpler: horse and harrow moving slow under the sky, Dandy’s ears swiveled back in case I told him gee or haw; the Mornings we’d lead the horses out of the barn, and because it was February, we’d bring them in again at night. One mare was in heat and we made the mistake of leading her into the barn just behind the stallion. He broke free from his lead and wheeled around to mount her. I was standing outside in the blue dark with another horse, but when the yellow glow of the lamps from the barn were eclipsed I looked back from my haltering to see a great fleshy wave rising up to the gable ends, one ton of horse stacked on another. In the confines of that space the pair was huge, their height mythically exaggerated by the framing of the barn door. In that moment I felt something storied take over, something bardic. I saw that these horses carried wild tales, old songs, poems and legends on their backs that bound people to a fading past and left them with small, tight balls of hope for the future.

These modern day horse farmers have a strange devotion; they’ve tapped into some pulse of living sap deep in an outwardly dying trunk. They are not Luddites or anachronisms. They are
not relics or wackos or the last twitches of a dying animal. But they are few in number, and they stand against a heavy stream. It’s hard to say how it will go on. As some of the last folks on earth who can plow a straight furrow or read a horse’s breeding in the shape of its withers and depth of its chest, these farmers may only be keeping the faith for the time that they work their fields, after which Davy Steele’s song will finally ring true. But something in their patience and the steady way they work their teams tells me otherwise.

Something about the way the world shrunk around me, standing for the first time behind Dandy in that field of spring garlic, held rapt for a few moments by the bond between human and horse, tells me we’re only on the far edge of a slowly turning wheel. In small ways and in small places, the gentle giants will keeping pulling, turning over the earth for each new spring.
Mugging at the Rim of Beerenberg by W. Jack Savage
Rust

JOE HARRITY

On the outskirts of Hibbing, Minnesota gapes the Hull-Rust-Mahoning Open Pit Iron Mine. Since the first gouges were cut in the 1890s, generations of miners have gnawed a ruddy gorge into more than five square miles of the North Woods. Today the hole ranks as one of the largest of its kind on earth. Though extraction peaked around midcentury, the mine is still expanding. The cavity is so large that it hosts its own pit lakes, mimicking the hydrology of the region.

Founded in 1893, settlement and pit grew quickly and concurrently to meet booming demand for iron ore. Before long, operators traced the lucrative vein below Hibbing itself, appraising the underfoot lode at $85 million. Soon, pit besieged town on three sides, leaving only one approach to the municipal peninsula. The furious wasting machine of World War I depended on ample steel production, so in 1918 the Oliver Mining Company formally proposed that the overburdened town migrate. Beginning in 1919, humans, horses, tractors, and a steam crawler dragged some two hundred buildings two miles south onto less valuable ground.

In spite of more than 120 years of strip mining, the Hibbing site preserves an intact point of natural interest. On a high hill within its fences rests the juncture of two continental divides; a humble divergence of three great watersheds. South and west of the rise water drains into the sprawling Mississippi catchment. Eastbound water declines swiftly into the massive freshwater reservoir of the Great Lakes. To the north, water moves ponderously toward the Hudson Bay. The Ojibwe name for the place is The Hill of Three Waters, and they and their antecedents long esteemed it as a meeting ground.

Mines like Hibbing's have hewn rusty
craters from forest all along the ferrous spine of northern Minnesota. The pits are ugly. Yet they pale compared to the desolation unveiled by receding glaciers some 10,000 years ago. That colossal, crushing ice harrowed the country.Depressions and hillocks compose the landscape today, the scars of abrasion and smothering. The storied networks of lakes and hardscrabble forests grow from a foundation of devastation. Many cherished vistas and campsites in Voyageurs National Park and the Boundary Waters Wilderness are perched on exposed bedrock. Clean parallel gouges in granite recall the great, suffocating death once inflicted by fresh, frozen water.

The changes continue. One morning in mid-May 1925, anglers arriving on the shores of the late Bass Lake witnessed a simulacrum of glacial destruction. In the night the lake had fallen 55 feet and shrunk by half, leaving three smaller pools in its drying bed. The roar of the evacuation had woken nearby loggers, who described the sound as thunderous. Their industry, which by that time had devoured most of Minnesota’s old white pine forest, bore responsibility for the Bass collapse.

For years, timber men had plunged logs down a sixty-foot sluice from Bass Lake into neighboring Low Lake for transport to mills. However, the slope they chose for their flume was not sturdy substrate but a glacial moraine—unconsolidated gravel acting as a natural dam. As logging dried up, the sluice was abandoned and seepage weakened the channel. The moraine gave out that late spring night, leaving a gorge 250 feet wide, a long, gravelly sandbar at Low Lake’s southwest tip, and three residual lakes: High Lake, Dry Lake, and the new Bass Lake.

I did not visit halcyon Low Lake until 2009, and loved the place before I knew its history. I carried a canoe across the sandbar, unaware that it had once cradled a lake. I splashed in the cold pools of the terraced, chattering waterfalls between Dry and Bass before I understood their origins in carelessness and plunder.

Just as the moraine, the lake, logging, mines, and towns have collapsed, so has the definition of the West. Minnesota’s northeast once made up the periphery of the Old Northwest to the expanding, navel-gazing USA. That land was all devastation 10,000 years ago, and has now borne acts of human destruction for over two hundred. Beauty persists, as do old boom towns and calls for new mines. The region has been vacant, wild, native, colonized, and wilded anew. What has been lost?

Provided a clear summer sky, a warm breezeless night, and an energetic geomagnetic storm, lake country will always offer a singular pleasure. Find a crop of bare stone at the edge of the water and watch the phantasm of the aurora slink up from the horizon. When the sky is well-kindled by the eerie green lights, look down and see the expanse of the universe mirrored below you. Then dive.
Too Big

TAYLOR HOPKINS

Mount Thielsen used to have a glacier
I sat and watched it disappear
from everything but my reference maps.
Lathrop Glacier.
Now at dusk
Thielsen still is like a purple brow
its one eyebrow raised high in question
the white glitter eye gone.
During this morning’s first release
I found a dead chickadee on the catwalk:
its neck broken.
It did not know how windows work.
Thaw

NICK TRIOLO

A nagging bladder causes the Congolese delegate to squirm. He tries to shift focus away from his midsection and redirect it upward, toward his head. Jetlagged from recent travels, the man’s attire covers up the fatigue: shiny, pointed shoes; socks embroidered with shapes of wildlife; white cuffs poking a quarter-inch from under a black designer suit; a platinum watch at the hinge of his wrist. The delegate’s legs reorganize from spread to crossed as he props his head up with an index finger to concentrate.

November 30th, 2015. 2:45 P.M.

The temperature outside flirts into the sixties, atypical for winter’s eve in the City of Light. It’s day one of the United Nations Climate Change Conference, the Conference of Parties, COP21, a twelve-day event attracting 38,000 participants from 190 countries to confront what many believe to be the most pressing issue of our time: a runaway climate. The delegates converge in Paris to broker a deal for acceptable global temperature rise and emission controls.

Fastened atop the conference is an enormous hardhat of security, its layers woven in Kevlar and barbed wire. The 120,000 policemen and gendarmes on duty nearly match the numbers summoned for the 1944 allied invasion of Normandy. In a way, our own bodies should be first to accept these precautions, as they too are designed for defense: ribcage for the heart, skull for the brain, and twenty square feet of skin to keep it all from spilling onto the sidewalk.

But COP21 security is different. It’s exhaustive, with reinforced walls and rooms guarded by thousands, all watching, listening and sniffing, while still tasting the metallic tang of vengeance following terrorist attacks in Paris that left 130 dead only weeks ago. COP21 enters its first day as a janitor crew at the Bataclan Concert Hall wire-scrubs purple bloodstains from General Admission.

High above the cleaning crew, thin-nosed drones fly by with their rotating cameras, while anti-aircraft missiles point in all directions. Beyond the drones, satellites hover stationary like caddisflies at dusk to watch every movement from space. The surveilled include not only delegates but the thousands of climate activists nearby, recently informed of France’s State of Emergency, that all public demonstrations are banned.

Despite this prohibition, the world marched. Over the previous two days, three quarters of a million people in 175 countries marched in 2,300 events. In London, 50,000. In Sydney, 45,000. In Madrid, 20,000. A teacher from the Marshall Islands, a South Pacific nation drowning from sea level rise, walked on stage in London to read a poem for her daughter in front of thousands. In Nanyuki, Kenya, hundreds of citizens marched along the equator. In Chile, a group shuffled in solidarity across a glacier near the country’s southern tip.

Paris had been muzzled, but the world hadn’t.

A fractured sun drops behind the city’s arrondissements, twenty districts that spiral numerically clockwise out from the city’s navel—the Louvre. Light bounces off high-rise windows from the financial district to the north, its skyscrapers peering into the cuts and curls of

I just wanted to feel something again.
Anything. I needed to thaw.
Climate Sit by Alex Wardell

Paris' Hausmannian architecture so revered by the romantic, the revolutionary, and the poet.

But COP21 isn't poetic. If it's attempting to be, the stanzas don't work. The metaphors don't pop; they read clunky and synthetic. Most delegates don't exude the passion Parisian lovers might. They don't smell of cognac and cigarettes but more like dry-cleaning and hand sanitizer. Plastered along these conference hallways is a different type of poetry, the sharp-fonted edge of corporate song. BNP Paribas, a French multinational bank and one of the largest in the world, has billions of investment dollars in coal-fired plants. Another, Engie, is Europe's largest importer of natural gas. Other sponsors include Coca-Cola, BMW, and Dow Chemicals. It's as if Budweiser and Coors were sponsoring a Mother's Against Drunk Driving convention.

The Congolese man leaves and returns to his seat holding a hot beverage. His shoes squeak at each step. A few heads swivel. Perhaps he doesn't worry about his brief absence because there are 300 other colleagues from the Democratic Republic of Congo in attendance, all focusing on piped-in translations of the current speaker on stage.

At least this is how I imagine it all going. This is how I imagine COP21 from 5,000 miles away in Missoula, Montana. This is how I imagine the single most important convergence
of world leaders and activists to agree on solutions for a livable planet, the same planet I'm sitting on now, alone, cross-legged and overtaken by an uncontrollable shiver in this pre-dawn, subzero dark.

If a physician were to check the University of Montana's heartbeat, she would place her stethoscope right where I sit, in the middle of the Oval, a bullseye around which all campus revolves. The bell tower in front of me strikes seven bells, a brass-to-mallet chime marking 7:00 A.M. The bells trail off, followed by nothing. It's two degrees below zero.

Paris. It must be warmer there. The thousands of delegates. The media. The fiery eyes. The tired eyes. The vultures. The busy footsteps, thousands of footsteps. The laptops
and blank pieces of paper. The compostable coffee cups made from bamboo or palm fronds, for good measure. The layers of security. The commercial storytelling loaded with sustainable, resiliency’s, and we’re-all-in-this-together’s. Sapphire. Cyan. Cobalt. Periwinkle. Lichen. Emerald. Teal. Pistachio. Corporate color spectrums, all borrowed from nature without asking.

My friend Will arrives on his bicycle, puffed in warm clothing. Will is a backcountry trail worker in his early thirties, and his beard smells of coffee as we hug. His fogged glasses are Seventies-era, looking as though he’d borrowed them from a retired librarian. Together, we resemble two circumpolar explorers, mislaid and near-frostbitten.

Drones and dogs and tanks and officers continue to wrap around Paris, while I cinch my own protection tight—a forest-green scarf my mother gave me. Survival tactics. I spread a tarp out on the concrete, and Will inflates a sleeping pad for us to sit on. Insulation, didn’t think of that. Will settles in beside me and props up a timer—fifty minutes, preset. After exchanging a few words, we drop into silence, a refrain that will hopefully envelop us for the next ten hours.

As the sun sets on Paris, our Montana sun considers its rise.

The idea haunted me for months. I had wished to join the Paris talks, somehow. The thought of this moment passing unnoticed by anyone seemed unacceptable. I was certain our world leaders wouldn’t act radically enough, so it was up to global citizen pressure from below to demand they act as boldly as possible. I also needed to feel again. I had become numb from recent developments. The drone of Donald Trump. The terrorist attacks in Paris. The weekly, no daily, mass shootings. My nation’s racial blindspots, black bodies too often becoming casualties at the hands of fear-triggered police. And, in the background of all this, I’d become numb to that quiet, uninterrupted Keeling Curve, that creeping atmospheric CO2 rise.

I’d also become a weary activist, amateur at best. After initially getting involved with Occupy Wall Street, I co-directed a campaign against Nestlé in Oregon, and would later organize international action to halt open-pit gold mining in Baja, Mexico. Following a trip to Bogota, Colombia to join a global campaign against Monsanto, in 2013, I was arrested in Helena, Montana, for sitting on train tracks to delay coal export. I spoke at divestment rallies, gave speeches, fundraised, passed out flyers, photographed, wrote op-eds. This time, I wished to act spontaneously. No meetings. No communication plans. No social media. No large signs. No call to the police, newspapers, or campus security asking for necessary permits. I just wanted to feel something again. Anything. I needed to thaw. So did Will.

The night before, I sent him a message:
Been thinking about doing an all-day silent sit on the University Oval tomorrow as a demonstration for COP21. Interested?
Silence. Then, a response:
That sounds insane. I’m caffeinated right now and that still sounds insane. I think I’m in, though. Send details.
I wrote back five thoughts:
1. Start at sunrise (7a). End at sunset (5p).
2. Middle of Oval.
3. No talking, no eating.
4. Every hour, we walk around the site six times, to represent our planet’s six extinctions, the current one triggered by (duh) humans.
I waited for ten minutes. No response.
Then, a reply:
See you tomorrow.

As Will and I begin our experiment, I still can’t feel much, not just from the freezing temperatures but from all the compounding despair, the barrage of darkness, the forecast of a planet on fire and my species—the arson—becoming increasingly selfish, fearful, and armed.
There go my toes.
There go my fingers.
There goes my planet.
Sunrise.

We settle into the first hour. Every two minutes I wiggle my extremities, unsure if frostbite is a serious concern and not wanting to find out. The flash of tomorrow’s headlines:

“A Bitter-Cold Irony: Activist Gets Frostbite in Fight Against Global Warming.

To the north, Mount Jumbo transitions from the shadows into the bruised color of lavender. Starting tomorrow, the city will close this local mountain to humans for three months for migrating elk. A beacon of human restraint. As I watch Jumbo’s rise, two loud trucks approach. I fear my plans have been foiled and that campus police would kick us out within the first hour. I slump cowardly and clamp my eyes shut to escape the oncoming defeat. A truck moves closer; I can smell its exhaust. Finally, a door swings open. Footsteps only a few feet away now. I wait for an officer to ask us to move on. Nothing. Instead, I open my eyes to see a groundsman checking a frozen sprinkler head. The other truck is sanding the sidewalk fifty yards away. The acoustics here bring sounds much closer than they actually are.

Bip! Bip! Bip! Will’s alarm sounds off. We rise, stretch our legs, and take a quick bathroom break. As my frozen toes kick a path through snow to the nearest building, doubt creeps in: Why the hell am I doing this? Nine more hours? This is fully absurd. Really. No one even knows I’m here. We return to the site and begin the first round of six circuits. Each of these circumambulations represent Earth’s cycles of extinction, The Big Five, and the sixth die-off currently being orchestrated by humans. With each lap I begin developing a mantra, nearly cheerleader-paced, to recite under my breath:


The temperature is on the rise, but it still hangs below five degrees. Walking generates body heat, but not much. It’s a fistful of wet duff thrown on dying embers. The pace forces me to breathe deep, to think long and go slow. This
may be counterintuitive when confronting the speed of cascading catastrophe, but it might be the most subversive way to combat today’s amphetamine-spiced demands. Writer Rebecca Solnit once said, “I suspect that the mind, like the feet, works at about three miles an hour. If this is so, then modern life is moving faster than the speed of thought, or thoughtfulness.”

As I walk, I imagine these versions of Earth, how all six of them brought me right here, to Missoula, Montana, walking in circles at the bottom of a prehistoric glacial lakebed. Here I’m mimicking some impossibly large process of life-giving through life-taking, billions of years of planetary re-evolution that somehow gifted me these feet, these eyes, this brain and this heart.

At 9:45am, the sun crests over the eastern ridge. Returning from Thanksgiving break, 12,000 students are in their final weeks of the semester: revising portfolios, late-night cramming sessions fueled on lattes and Adderall. Our demonstration sits along a well-worn path on campus, between the cafeteria and University Center. As students begin to stroll past us, some of their heads turn.

What’s this all about? Yo, check it. Are they meditating? They must be straight frozen.

An iPhone camera clicks, and I open my eyes to find a young girl squatting in front of us. “Are you here for a cause of some sort?” she asks in a high-pitched voice. We had set out leaflets to explain our demonstration and I point to one. The girl picks it up and reads, while a grizzly bear roars on the front of her Letterman jacket. The school’s mascot was a species brought to the cliff-edge of extinction in the 1800s. The student is young, with a backpack bulging with books and binders. Her mug wafts comforting smells of chocolate and nutmeg.

“Thank you,” she exclaims, nodding her head and hurrying to class.

The day warms and our routine remains structured: fifty-minute sit; *bip! bip! bip!* Rise and stretch; bathroom break; return for six circumambulations; start again. At one point, the sound of my own footsteps slips me into one of the 10,000 pairs of shoes placed in Paris’ Place de République yesterday in response to the COP21 protest ban. Among them were pairs sent by Pope Francis and UN Secretary General Ban Ki Moon. The bottoms of my feet regain sensation.

Eleven strikes of the bell tower mark the end of morning classes, and a surge of students enter the Oval. Thousands of footsteps stampede around us. This space is a storm’s eye of sound. Footsteps coming, footsteps going. Thousands of them, all with unique signatures: a *click-clack* followed by a *schook-schook*. In the distance, a mile-and-a-half long coal train slithers in from eastern Montana, its goods destined for Washington ports to be shipped overseas. Montana harbors the largest recoverable coal reserves of any state in the U.S.—120 billion tons. As students follow their regular routes from classroom to cafeteria, these machines do, too, from mine to port. The train changes tracks as we swivel our own position to follow the sun. The sky has now turned to a deep, lake-bottom blue.

**Full Sun.**

The sun halos overhead now but is passing quickly west. We’ve rotated 180 degrees and point southwest, our faces tracing the warmth. My stomach pangs empty, the outer skinfolds wet with perspiration. Though I’m overheating in thick clothing, my extremities remain frozen. On the hour, thousands of students purge from pent-up lecture halls, their tidal ebb and flow sounding more pronounced. Many pass us and stop. Our leaflets invite people to join our circumambulations. Once, I catch a student walking in circles, her eyes closed, her every step known. Another student snaps photos and whispers to us that the images were just sent to a journalist inside COP21.

The thaw has begun. Feeling is coming back.

By now, world leaders in Paris have all dispersed for the evening, leaving Le Bourget for dinner reservations somewhere private. I imagine them sipping wine overpriced but French, a rosé or a flute of grower champagne followed by aged cheese, all in candlelit comfort and watched by security. Such aristocratic pleasantry feels worlds away as I sit here, outside, hungry in Montana, surrounded by thousands of students making their way in the world. Each of their steps echo of the future, the rush of billions queued up long after I’m gone. At our current rate, one million new lives are added to the planet every four days. That’s one million screaming, bloody bodies, one million mouths feeding, hearts beating. No matter the

Suddenly, I catch something running to my left. Peering into the sun, a husky strides towards us off leash. His paws crunch in the snow as the dog vaults forward now, picking up speed. Closer. Faster. Bigger. His eyes blink of an attack, teeth white and wolf-sharp. I shut my eyes to brace myself as he reaches us.

Instead, a sandpapery tongue rolls warm across my face, then Will’s. The husky’s breath is gamey, and the tongue’s saliva soothes my sun-chapped cheeks. We lock eyes; his reflect the color of arctic shallows. Immediately, the dog turns in circles and urinates in the snow next to us.

Sunset.

“What the fuck are you guys doing?”

With one hour until sunset, I find the young man’s voice arrogant and sharp. Will and I are hungry, tired, and sore. For nine hours we’d sat in silence without one critical voice or policeman telling us to leave. Opening my eyes, a student stands in front of us—muscular thighs, buzzed hair, dirt-worn worker boots. His fingertips tuck into the front pockets of his Wrangler blue jeans. I point to our leaflets and prepare to be harangued. He picks up the paper. I watch his eyes shift, his chest-puffed posture, and his weight leaning to one meaty leg. He lets out the occasional smirk as he reads, chased by eyebrows that curl like question marks.

“What the hell?” he says, leaning back as if to begin his own encyclical on how climate change is a myth, how we’re all a bunch of hippie nutbags that need to return to whatever hole we came from. My guard surfaces like steel-tipped thorns to defend against the student’s projections. It’s coming, I just don’t know when. Finally, he rubs his crew-cut hair, takes one long look at us both, exhales, and says:

“That’s tiiiight.”

Waving the leaflet in the air, he gives us a thumbs-up in support and walks away smiling, reading it as he goes. The thaw has commenced.

With fifteen minutes to go until sunset, the campus has grown quiet. A mother and her young child walk up behind us. The three-year old girl waddles along the ice and wears a bubble-gum-pink beanie with fruit-juice stained all over her face.

“Mommy, what are they doing?” she says, turning to her mother for a hand. Survival tactics, I get it. Like the 120,000 policemen watching Paris right now, like the high-flying drones, like the six layers of clothing I hide behind. The mother picks up a leaflet and explains to the child something about us sitting for the future. The kid’s little eyes survey us. Then, she looks me square in the face, as if to whisper:

Keep going.

I start to tear up but have concerns they might freeze my eyelids shut so I hold back. This is for you, I try responding through my gaze. I’m here because I’ve forgotten. I forget a lot. I’m sorry. But I’m trying to remember that this is for you. I’m trying. I shut my eyes as the child walks away, clasping her mother’s mitten.

The thaw is complete.

And with five strikes of the bell tower, it’s over.

Will and I break posture, stand, and embrace. We close our time with six final revolutions around the Oval. The cold is biting again. Students have all gone home. Mount Jumbo tucks back under its blanket of lavender bruise to rest the night before welcoming home elk, not humans, tomorrow. During our sixth and final lap, I am neither surrendered to extinction nor hope-drunk that our climate problem is entirely solvable.

It’s not the climate. It’s us. The crisis is local. So is its cure.

These last steps join a growing thump of footprints around the world that call for humility and restraint. Our last circuit both celebrates the ecological rule of the road—revolution—while also calling on our imaginations to do the work necessary for reparations, so that, on this sixth round, at least we tried. And this initial spark must be internal, not just buying local but acting local, tending to the locality of Self.

The revolution is local.
This is for you, I try responding through my gaze. I’m here because I’ve forgotten. I forget a lot. I’m sorry. But I’m trying to remember that this is for you. I’m trying.
Prayer In Motion

PHOTO AND WORDS BY TOM MURPHY

A Sherpa elder spins a giant Buddhist prayer wheel in Chaurikharka, an area in Nepal’s Khumbu region

In 2005, when this image was taken, Nepal was in turmoil with Maoist revolt, city-wide curfews in Kathmandu, and the recent death of the entire royal family. This was the beginning of big changes for the tiny home of some of the world’s largest peaks.

As the old man gently spins the prayer wheel, filled with the meditative mantras of monks, the sound of oiled metal on metal resonates under the tin roof. The simplicity of his action reflects the relative simplicity of life in the Khumbu. His focus and calm are my inspiration and I feel a gentle shift, realizing that there is movement in routine and familiarity.

Many of us have moved thousands of miles from where we grew up to find inspiration, prosperity, and individuality. We have sought redefinition and change — our own personal revolutions against our pasts.
Book Review

BY MATT HART

Cold-Eyed Clarity and Refried Beans

David Gessner’s All the Wild That Remains: Edward Abbey, Wallace Stegner, and the American West

If only they could see us now.
A familiar sentiment, sure—wondering
what those who are gone would make of the
present. But the basis for a book? Seems awfully
frivolous.

Not so when David Gessner gets his hands
on the lives and works of Edward Abbey and
Wallace Stegner, two grand and often opposing
pillars of environmental thought in the American
West. Not so when one of this century’s most
resonant voices narrates an eco-literary tennis
match between two of the last’s, when the setting
is the whole baked West itself during “a summer
of fires and fracking.”

We might call Gessner’s premise of
comparing his intellectual heroes an indulgence,
but it’s a precise one. For as we learn quickly upon
opening All the Wild That Remains: Edward
Abbey, Wallace Stegner, and the American West
(2015), the words of Abbey and Stegner pulse
urgently today. Tracing the two authors’ lifepaths
during a drought-stricken summer, Gessner
surveys the natural and cultural landscapes of
today’s West, tests them against the ideas of his
icons, and concludes that “their books can serve
as guides, as surely as any gazetteer.”

We also learn that Gessner is a uniquely
qualified guide himself. Many a green young
soul has read Desert Solitaire, laced up their
hiking boots, and pointed the car West—this
reviewer among them. But you’d be hard-pressed
to find the fan who knows Abbey and Stegner as
comprehensively as Gessner. Or one who has put
his discipleship of the two to better use. Already
the author of eight books and dozens of essays,
Gessner has assumed the stylistic torch of Abbey
in particular, with a unique ability to charm with
his humor in one paragraph and inspire with
his insight in the next. While discussing Abbey’s
cult following, he pokes fun at his younger self,
a writing student in Boulder, remembering “the
cans of refried beans I ate, part of the official
Ed Abbey diet.” But what lies behind groupie
tendencies, he goes on to muse, “is something far
to better … A hunger for models. For possibilities.
For how to be in the world.”

With its shifts from the light-hearted
to the profound, from the past to the present,
Gessner’s book is as engaging as it is indefinable,
part literary biography, part travelogue, part eco-
polemic. It takes us from Wendell Berry’s farm in
Kentucky to Stegner’s hometown in Saskatchewan,
from Gessner’s own trip “Down the River with
Ed and Wally” to Doug Peacock’s front porch in
Livingston, Montana. In quiet moments, sitting
above the Green River with Gessner as sunlight
turns the water to “mirrored glass, blinding”, we
renew our love for the untamed heart of the West.
In the fracking boom town of Vernal, Utah, where
Gessner drinks with the locals and is told, “Tree
huggers should go somewhere else,” we tremble
for its future.

But just as powerfully as his touring of the
contemporary West, Gessner tours through the
hearts of two monumental men. And we learn
that while the regionally-revered authors espoused
widely different approaches to environmental
protection, both were committed to action,
staunchly opposing the writer’s trap of remaining
content on the sidelines. “One brave act is worth
a thousand books,” wrote Abbey, the anarchist,
the burner of billboards and pourer of sugar into
bulldozers. Stegner, committed to the notion that
a just and sustainable American culture was still
possible, sat through long meetings and authored
proposals to protect wildlands. “The highest thing
I can think of doing is literary,” he wrote. “But literature does not exist in a vacuum.”

“Cold-eyed clarity” is the virtue Gessner ascribes to Stegner. And Abbey possessed his own version, with the long view of deep ecology joined to his modern iconoclasm. Both men knew the realities of their region and its history of abuse, and they fought like hell to improve its future. With the West now changing rapidly, Gessner resolves, we have never needed a strong dose of these authors’ lucidity more. “Stegner understood the necessity of hope,” he writes, “but in the end knew that cold-eyed clarity was more important.”

I first read All the Wild That Remains a year ago, home in New England, preparing to move to Montana. Gessner made me pine for the West, but more importantly, he gave me vigor for the work ahead. Running through damp woods in early spring, the words of Abbey and Stegner and Gessner conspiring with the acrid smell of skunk cabbage, I knew that as chilling as the future might seem, those shots of wild beauty remain, and there is nothing to do but lean into the cold, clear our eyes, and stride forward.

David Gessner is the author of nine books, including Sick of Nature, My Green Manifesto, and The Tarball Chronicles. His work has appeared in Outside and the New York Times Magazine, among others. Gessner taught Environmental Writing as a Briggs-Copeland Lecturer at Harvard, and is currently a Professor at the University of North Carolina at Wilmington, where he founded the award-winning literary journal of place, Ecotone.

All The Wild That Remains: Edward Abbey, Wallace Stegner, and the American West is available from W.W. Norton & Company. $16.95; 368 pages.

Published by ScholarWorks at University of Montana, 2016
Here we are wedged fast between beginnings and endings, not quite apprehending the enormity of what we see.
Gone but Not Forgotten by Larry Hefling
Phillip Aijian received an MA in creative writing from the University of Missouri, and is currently pursuing a PhD in English at the University of California, Irvine, where he studies Shakespeare's politics and theology. His poems have been published in *ZZYZYVA*, *Bacopa Literary Review*, and *Heron Tree*. He lives in Fullerton, CA, with his family and guitars.

Ser Anderson is a graduate of University of Montana, having earned a BA in Environmental Studies with a focus on nature writing in 2013. Ser is a plant lover, avid bird watcher, chaser of butterflies, and recent convert to appreciation of the endlessly diverse world of other insects.

Kaycee Anseth uses discarded fashion and home decor magazines as her fodder for creating intricately detailed collages that explore the realms of myth and fairytale as they pertain to personal narrative. Her process is akin to painting with paper, incorporating the eye-popping palettes of high-gloss advertising into both intricate patterns and whimsical figures. Though a southerner, Kaycee has made her home in Central Oregon for over ten years. See more at kayceeansethcreations.com.

Sharmar Apt Russell is an award-winning nature and science writer with some dozen books translated into a dozen languages. Her *Diary of a Citizen Scientist: Chasing Tiger Beetles and Other New Ways of Engaging the World* (Oregon State University Press, 2014) won the 2016 John Burroughs Award for Distinguished Nature Writing. Her recent eco-sci-fi *Knocking on Heaven’s Door* combines panpsychism with a Paleoterrific future. She teaches writing at Western New Mexico University and in the low-residency MFA program at Antioch University in L.A. For more information, go to www.sharmaratprussell.com.

Bayla Arietta was born and raised in the Hudson Valley and has been incessantly painting and drawing the people and environments around her since the day she could first hold a crayon. Her work is primarily in watercolors and depicts whimsical narrative renditions of everyday life. Bayla currently lives and works in Missoula, MT. Her work can be seen at www.BaylaArt.com.

Ke’Vin Bowers is a North Idaho native, a Santa Fe transplant and a Scottsdale desert rat. Like many artists, he felt that when he crossed the state line into New Mexico he was home. His work encompasses the people, animals, and architecture of Arizona, New Mexico and surrounding areas.

Thomas Gillaspie is a northern California photographer with an interest in urban minimalism. His photography has been featured in numerous magazines including the literary journals *Compose* and *DMQ*.

Peter Gurche was born, raised, and educated in eastern Washington. Fed up with staring at a computer screen after college, he headed north to Alaska to work as a commercial salmon fisherman for four summers, and as a carpenter and mechanic during the off-seasons. Having gotten a good fix of practical learning, he is now back in school pursuing a Master’s in Environmental Studies with an emphasis on writing. He enjoys skiing, baking, and music-making.

Matt Hart is an Environmental Writing student in the Environmental Studies Graduate Program at the University of Montana. He has roots in New England and Upstate New York, and has lived in the West for much of his twenties. His essay “Common Ground” will appear in the forthcoming “Change Issue” of *Whitefish Review*.

Joe Harrity lives just west of the Mississippi - two miles from the largest falls on the river, which have been covered in an apron of concrete since the 19th century.

Larry Heffing lives in Pagosa Springs, CO, with his wife Kristie and enjoys photographing the beauty of the Four Corners Region. These photos were taken with a Nikon D800 and a Nikon 14-24mm F2.8 lens.

Taylor Hopkins began his nature photography career while working with the US Forest Service in the Bob Marshall Wilderness. Since, he has been published in *Camas Magazine* and his work has also been shown at auction. Taylor spends his summers in fire lookouts in central Oregon to provide content for his camera.

Ben Johnson is a native of Montana and a resident of Wyoming who always elects to lug the extra weight of camera gear in his explorations of wild landscapes. More of his work can be found at lensofenjohnson.com.

Jayne Marek’s poetry and art photography have appeared in journals such as the *New Mexico Review*, *Gravel, Siren, Flying Island*, *Tipton Poetry Journal*, and more. She has published a co-authored book of poems, a chapbook, and numerous articles, and she recently watched an eagle steal a fish from an otter.

Amy Miller’s writing has appeared in *Camas*, *Rattle*, *Willow Springs*, *ZZYZYVA*, *Fine Gardening*, *The Poet’s Market*, and *Asimov’s Science Fiction*, and her latest chapbooks are *Rough House* (White Knuckle Press) and *White Noise Lullaby* (Cyclopean Press). She lives in Ashland, OR.

Tom Murphy has been living and working in the San Juan Islands since 2001. He now is the owner and operator of Outdoor Odysseys Sea Kayaking based in Friday Harbor and a ski ambassador for Outdoor Research. His images are from travels both near and far and are a departure from the typical journalistic approach to travel photography. While Washington is his home, Tom spends his winters skiing anywhere from his backyard of the Cascades to the Alps of Japan.

Mitchell Pluto has been specializing in the radiology of the collective unconsciousness and practicing surrealism since 1997. His themes include creative consciousness, healing and nature. He lives with his wife in Montana, where they create handmade rustic jewelry for their company Gypsy Moon Designs.

Anna Schreck is a photographer living in Missoula, MT. She studied at the Rocky Mountain School of Photography and has numerous publications.

W. Jack Savage is a retired broadcaster and educator. He is the author of seven books including *Imagination: The Art of W. Jack Savage* (wjacksavage.com). To date, more than fifty of Jack’s short stories and over four-hundred of his paintings and drawings have been published worldwide. Jack and his wife Cathy live in Monrovia, CA.

Nick Triolo is a writer, activist, and long-distance runner living in Missoula, MT. His work has been featured in *Orion Magazine*, *Terrain.org*, *Trail Runner Magazine*, and others. Nick is currently working on his first book project. Visit his website, *The Jasmine Dialogues*, for more.

Teresa Vanaireisdale was raised in a small town in the Pacific Northwest, and has always enjoyed the outdoors. Her degree in English/Creative Writing is from Eastern Washington University in Spokane/Cheney where she was lucky enough to be mentored by some great writers.

Alex Wardell is a photographer, videographer, and mother from Missoula, MT.

Matt Witt is a photographer, writer, and backpacker who lives in rural Oregon. He has been artist in residence at Crater Lake National Park and Playa in Summer Lake, OR. His work can be viewed at MattWittPhotography.com.
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