Where the grizzly can walk, the earth is healthy and whole.

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Cover photo by Lance Schelvan

The Vital Ground Foundation is the premier private-sector organization ensuring the recovery and long-term survival of grizzly bears through the protection and restoration of natural areas and corridors where grizzly bears and other wildlife can move freely and safely. We also help reduce conflicts between bears and humans by supporting “bear aware” communities.
Bears on the Move!

Montana’s upper Big Hole River valley is located in the southwest corner of the state and is surrounded by the Beaverhead-Deerlodge National Forest. Renowned for high-quality outdoor recreation, the region forms a protected hub of wildlife habitat connecting the Gallatin National Forest abutting Yellowstone National Park to the southeast, and the Bitterroot, Lolo, Flathead and Kootenai National Forests that run west to Idaho’s vast wilderness areas and north all the way up to Glacier National Park and the Canada border.

Although this broad valley is strategically situated between three federally-designated grizzly bear recovery zones, it has been considered devoid of grizzly bears for nearly a century – until this summer.

Two confirmed observations of grizzlies in the Big Hole have biologists excited about the prospect that the big bears could be moving north from Yellowstone or south from the Northern Continental Divide Ecosystem (no one is yet certain which the case may be). Regardless, recent sightings are strong evidence that the landscape is sufficiently intact to maintain a connection for these adaptable animals.

Farther north and west, grizzlies may also be pushing into Washington state. According to a recent U.S. Fish and Wildlife Service briefing, a multi-agency team of wildlife biologists in June captured and radio-collared a young male bear in the Selkirk Mountains in Washington’s northeast corner. The event, which occurred near Sullivan Lake in Pend Oreille County, marked the state’s first grizzly capture in more than 30 years!

And for several years, grizzlies have frequently ventured out onto the prairie east of the Northern Continental Divide’s Rocky Mountain Front in north-central Montana and Alberta. Either trailing out along riparian stringers and popping up onto cultivated plains like overgrown prairie dogs, or roaming out through grasslands and wheat fields with the determination of furry ATVs, the bears clearly seem to seek vast prairie habitat for which their renowned digging acumen originally evolved.

During a dozen years at Vital Ground, I have been repeatedly asked what the organization had left to accomplish if grizzlies recover and their status is downgraded from federal protections. It’s obviously far too early to declare recovery for all of the Lower 48’s brown bear populations, but these early ursine pioneers that are working to expand the definition of “occupied grizzly habitat” are definitively showing us that reestablishing the Great Bear will deliver more opportunities for Vital Ground to protect key grizzly habitat on a much broader scale. As grizzlies extend their tracks across the landscape, it will be critical for Vital Ground to collaborate with new partners to continue to augment the social carrying capacity of these repopulated habitats.

That’s precisely why Vital Ground has been ramping up its Conservation Partners grant program. At the beginning of 2016, the organization fortuitously partnered with the Wildlife Management Institute to promote outreach and education in exactly the right place for grizzlies to make their first appearance in a century (see pg. 5). The program also staked new ground in directly supporting the community of Troy, Mont., in securing its garbage collection area – a site of frequent black bear conflicts in the heart of grizzly country – by paying for fencing to prevent access to this attraction (pg. 5).

Your Fall Bart the Bear Appeal will soon arrive in the mailbox. If you would like to join Vital Ground in helping to ensure that grizzlies are greeted with tolerance and understanding as they make their first appearances in areas where folks haven’t thought about them for a long time, please take a few extra minutes to think about how you can help – and join Vital Ground in making a difference.
To a grizzly bear, 43 acres may not seem like much. But the right 43 acres can make a world of difference.

That was the guiding principle that drew Vital Ground to a block of steep forestland in the Weber Gulch drainage of the southern Cabinet Mountains, just north of Thompson Falls, Mont. It’s a sentiment worth celebrating now, as the foundation announced our purchase of the property in September, after more than a year of building partnerships in support of the conservation project.

“I’m excited about it,” says Dave Wrobleski, a wildlife biologist for the Plains/Thompson Falls District of the U.S. Forest Service. “It’s only 43 acres, but the negatives of a road or house up there would affect a lot more than 43 acres.”

Situated amid sprawling ponderosa pine forest at the southern tip of the federally-designated Cabinet-Yaak Grizzly Bear Recovery Zone, the undeveloped square of private land stands entirely bordered by Lolo National Forest, with much of its surrounding terrain within the Cube Iron-Mt. Silcox Roadless Area, a popular spot for local hikers and hunters. Had the owner of the inholding chosen to sell the acreage for real estate or timber, the buyer would have carried rights to build a road to the land. Construction would have cut into the designated roadless area and proven enormously costly for the Forest Service, requiring many hours of federal oversight and necessitating road closures elsewhere in the Grizzly Bear Recovery Zone, in keeping with federal habitat protection standards.

“It would have been a public nightmare,” says Wrobleski. “The road would have reduced grizzly bear core habitat and would have been a visual issue for the town of Thompson Falls. People like being able to see the wild country and the mountains, and it also allows us to better provide road access for the public, which is a big deal around here. We would have had to provide road access for one person, instead of for everyone.”

Of course, it’s not just bears and people that will benefit from the conservation of Weber Gulch. With its elevation ranging between 3,500 and 4,500 feet, the place provides elk, deer and moose with an important transition zone between their mountainous summer ranges and the lower terrain to which they descend in winter as snow fills the high country. Following them down are mountain lions, bobcats, occasionally even an elusive wolverine or lynx. And when the days grow longer and the snowline recedes in spring, mid-elevation zones like Weber Gulch become all-important calving grounds, particularly for the elk herds that require large chunks of unimpeded habitat to maintain the health of their populations.

Ultimately, Vital Ground may seek to convey the parcel to the Lolo National Forest, completing federal management of the Weber Gulch drainage. But for now, the foundation and our conservation partners will celebrate the contiguous forest habitat that we have preserved.

Because who knows? For a bear cub or an elk calf next spring, those 43 acres might just make all the difference.

—By Matt Hart
You probably know Vital Ground for our work as a land trust, for conservation easements and property purchases to protect critical wildlife habitat. In 2004 we made a strategic decision to evolve from a grant-making institution that provided funding to organizations that supported our mission to a full-fledged, operating land trust. We haven’t forgotten how important grants are, however, which is why we’ve continued our Conservation Partner Grants program. Recently, as successful bear recovery in certain areas has led to grizzlies expanding their range, we’ve turned new focus to supporting “Bear Aware” communities within our primary project areas. So far in 2016, we’ve granted $40,000 to four partner organizations working to protect habitat or improve social tolerance of grizzlies through education, outreach and research.

Swan Valley Bear Resources: Bear Awareness Projects

The Swan Valley hosts deep roots for Vital Ground in Montana. Our first conservation easements happened there, and it still holds our largest collection of habitat protection projects. So we were eager to aid Swan Valley Bear Resources (SVBR), a collaborative group doing vital work to reduce bear mortality in the area. SVBR is all about education – by teaching landowners about things like bear-resistant garbage containers and bear-proof fencing for livestock, the group is actively reducing the risk of bear-human conflicts. We’re honored to contribute to their great work.

The Nature Conservancy of Canada: Luxor Linkage Project

Grizzly bears don’t recognize international borders, so Vital Ground doesn’t let them limit our work. We were delighted to provide a partner grant for TNC Canada’s Luxor Linkage acquisition, a project to protect 960 acres of remarkable connective habitat between the Purcell Mountains of British Columbia and the Canadian Rockies to their east. Grizzlies, endangered badgers, mountain goats and moose are just a few of the species that will benefit from the conservation of this lush wetland area.
Troy, Montana:
Fencing Improvement Project

Nestled near two Vital Ground properties in the heart of the Cabinet-Yaak Ecosystem, the 1,000-person city of Troy, Montana knows a lot about bears. And the bruins know about the city, too, with its fruit trees, berry bushes, and accessible garbage creating an unfortunate history of conflict. We’re excited to partner with Troy, Lincoln County, and Montana Fish, Wildlife, & Parks on a new effort to consolidate garbage containment to one area in the city, and to install electric fencing that will prevent bears from accessing it. Keeping bears in the forest and out of the dump—sounds like a win to us.

Wildlife Management Institute:
Southwest Montana Bear Education Program

Southwest Montana is particularly vital ground in the effort to link Greater Yellowstone’s grizzlies with other subpopulations. As bears continue to recover there and expand their range beyond the national park, Wildlife Management Institute has partnered with Red Rocks Lakes National Wildlife Refuge on a two-year effort to develop educational programs that will reduce bear-human conflicts west of Yellowstone. From training the next generation of bear conservationists to installing bear-proof containers in campgrounds, we’re behind this effort every step of the way.

Three yards and a cloud of ... capsaicin!

Vital Ground supports educational programs that help reduce bear-human conflicts, including the Wildlife Management Institute’s Southwest Montana Bear Safety Education Program and this clever idea that mimics a charging bear. Photo by Tah Madsen.
When her schoolteacher in Kuwait introduced her to World Wildlife Fund (WWF), Sou Barrett immediately fell in love with conservation. At age 10, she identified a calling to do something about the state of the natural world. Something about conservation affected the deepest part of Sou’s soul. She immediately began knocking on doors selling chocolates, raising money for WWF.

Sou has worked her entire life to improve the world and the state of the environment. After meeting her husband John, Sou moved to Missoula, Mont., and began volunteering at various non-profits.

It was as if Sou’s introduction to Vital Ground was fated. She turned on the television one afternoon and saw Animal Planet’s Growing Up Grizzly II featuring Jennifer Aniston. The one-hour special featuring Vital Ground Bear Ambassadors Bart and Honey-Bump introduced Sou to an organization whose mission and action encompassed preserving fish and wildlife habitat through carnivore conservation.

As soon as the television program ended, Sou logged on to VitalGround.org to donate and learned Vital Ground would soon move its headquarters to Missoula. Sou’s involvement with Vital Ground was “meant to be.” Sou could now actualize her passion for improving the natural world by advocating for an organization to which she felt connected to on an elemental level.

Sou takes advocacy to the next level, and is a strong believer in the idea, “Whatever you can give, give. If people gave to whatever it is that they are passionate about, we’d have a much better world.”

Sou holds herself to the highest standards, constantly asking the question, “How can I do something positive?” No matter time or place, any opportunity Sou has to bend someone’s ear, she talks about Vital Ground.

She volunteers time, promotes awareness, and instills conservation values in her daughter, Athena. Athena often comes to Vital Ground gatherings and receptions. Sou makes it crystal clear that Vital Ground’s mission is important not only to her, but also to Athena and her future. Sou says that these experiences have opened Athena’s eyes, and she is becoming aware of conservation and the importance of the natural world.

Sou and John belong to Vital Ground’s Grizzly Council, of which Sou is the chair. The Grizzly Council is philanthropic committee that includes the organization’s top donors – those who have contributed $25,000 or more, or donated conservation land or easements valued at $100,000 or more to the organization. As the chair of the Grizzly Council, Sou coordinates efforts to acknowledge members of Grizzly Council and increase the involvement of those members in Vital Ground’s decision-making process.

In addition to her role on the Grizzly Council, Sou was elected to Vital Ground’s board of trustees, and she is also a member of the Vital Ground’s Finance and Development committees.

Sou’s commitment is bolstered by a deep belief that the world can be made a better place. She encourages people to not become overwhelmed or scared because they think conserving the natural world is too large of a project. Sou firmly believes that if we keep putting one foot in front of the other and keep moving forward, we can make a difference.

— By Adrienne Ingram

Adrienne Ingram is part of Vital Ground’s media production and outreach team. She currently lives in New Orleans, where she is an undergraduate student at Loyola University New Orleans.
Chicago Zoological Society Awards Vital Ground $17,500

In July The Chicago Zoological Society (CZS) awarded The Vital Ground Foundation $17,500 from their Conservation Fund. Since 2011, CZS has provided Vital Ground with $85,000 for wildlife habitat conservation.

The CZS Conservation Fund was created in 2011 with the purpose of supporting initiatives in conservation leadership, animal welfare, field programs, research initiatives and training conservation leaders. The fund is replenished every year through contributions by Brookfield Zoo visitors.

CZS’s conservation programs and partnerships extend far beyond the gates of Brookfield Zoo. From their own initiatives to partnerships with other accredited zoos, universities, and conservation groups, they support conservation research and programs around the world, including elephants and giraffe ecology in Africa, snow leopard conservation in Asia, wombat breeding in Central America, and grizzly bear habitat conservation in North America – to name just a few.

In 2013 the Chicago Zoological Society became a member of Vital Ground’s Grizzly Council, a special designation for Vital Ground’s top donors.

Brookfield Zoo Keepers Make a Difference for Grizzly Bears

The Brookfield Chapter of the American Association of Zoo Keepers (AAZK) held their annual spaghetti dinner fundraiser in March and raised a whopping $5,308 for Vital Ground! Since 2010, the close-knit group of animal keepers have raised more than $50,000 for grizzly bears and wildlife habitat conservation.

Dawn Sohr, president of the Brookfield AAZK and senior animal keeper in the Primate Department of the Brookfield Zoo, said their chapter admires the work that Vital Ground does in providing for and protecting North America’s beautiful grizzly bear populations.

“We truly value what you do and the friendship that we have developed with all of you through the years,” she said.

That admiration and respect goes both ways, as Vital Ground’s board of trustees, advisors and staff truly appreciate the volunteers of the Brookfield Chapter of professional zoo keepers and friends dedicated to professional animal care and conservation – and for their stellar support providing significant dollars that not only make a difference for grizzly bears, but for all the other species that inhabit the land including elk, deer, lynx, bull trout, and many other plant and animal communities of the northern Rockies.

Performing Under Pressure

Fear is an emotion that can push humans to their ultimate potential. This productive nature of fear is exactly what the Red Bull High Performance group set out to understand with “Performing Under Pressure,” a week-long training camp that pushed 10 elite athletes out of their comfort zones and through a series of fear-based activities.

Last June Doug and Lynne Seus and Bart the Bear II traveled to Montana to participate in the Redbull event. There, a team of physiologists tested the group’s physical and mental responses to challenges such as going head to head with massive pythons, laughing and crying on command and underwater breath-hold exercises, and being surprised by a big brown bear – one named Bart.
Within the alpine and subalpine woodlands of the northern Rocky Mountains and the great coastal forests of the Pacific Northwest, grizzly bears are opportunistic feeders. They eat what’s available, depending on the season. In early spring after hibernation, they graze on newly emerging grasses and scavenge winter-kill carcasses. In late spring, they mostly eat sprouting grasses and sedges, flowering glacier lilies and spring beauties, while a few learn to prey on newborn elk, moose and other immature ungulates. In summer, they dine on a variety of plants, roots, insects and rodents. Some learn to feast on spawning trout and salmon from streams and on berries and whitebark pine nuts. In the fall, in preparation for hibernation, they gorge on as much high-calorie food as they can find, gaining three to six pounds per day! These large omnivores certainly have a presence in their wild neighborhoods. As a result, they are often called a “keystone species.”

If the grizzly population is healthy and strong, it’s likely that wildlife and plant communities are intact and vibrant. Trumpeter swans photo by Lisa Densmore Ballard.

The term “keystone species” is named for the keystone at the top of an arch. If you remove that stone, the arch collapses. A keystone species plays the same role in an ecosystem. Extirpate the animal, and the ecosystem changes dramatically. The phrase was coined in 1966 by Robert Paine, a biologist studying intertidal zones in the Pacific Northwest, to describe the Pisaster starfish, an aggressive hunter that eats barnacles, freeing up critical space on rocks. Paine found when the starfish were present and active, there was a wider array of sea life present.

Grizzly bears might or might not be considered a keystone species depending on whether you take an ecological or a conservation point of view. “The term keystone species is thrown around a lot,” says Chris Servheen, Adjunct Research Associate Professor of Wildlife Conservation at the University of Montana’s College of Forestry and Conservation, “It applies to grizzly bears in a conservation context because, if you manage for this species, it carries others with it. If you protect grizzlies, you protect other animals. However, if you mean fundamental to an ecosystem, it doesn’t exactly apply. If you remove grizzly bears, there won’t be massive change, like removing zooplankton from the ocean.”

Perhaps “umbrella species” is a more accurate term. According to Servheen, if grizzly bears have an adequately large home range which is safely connected to other large tracts of wild land, other species flourish along with the bears.

Doug Chadwick, a wildlife biologist and one of Vital Ground’s founding board members agrees. “A grizzly bear doesn’t have a specific role as, say, wolves in Yellowstone, the dominant carnivore there, because bears are generalist omnivores.” Chadwick likens them to heavy-weight gardeners. “A grizzly bear is the primary earth mover in the high country,” he says, “It digs for bulbs, ground squirrels, voles and marmots. Its long claws rake and turn over huge areas. Over the years, large areas are furrowed, pitted and worked by bears which brings

If the grizzly population is healthy and strong, it’s likely that wildlife and plant communities are intact and vibrant. Trumpeter swans photo by Lisa Densmore Ballard.
“Habitat security is mainly affected by motorized routes,” says Servheen, “Bears avoid motor vehicles which eliminates habitat. Vehicular routes also increase mortality risk because they increase poaching and hunting. If you lower motorized access to land, there’s better bull-cow ratios among elk because you’re not selecting out the biggest, strongest bulls. Grizzly bears have a direct conservation umbrella effect on elk. It applies to moose and deer, too.”

Servheen also emphasizes the importance of keeping bears out of the front country at campgrounds and around livestock, and in the backcountry at tent sites. “When you electrify a chicken coop or hang your food while camping, you do it for the grizzlies, but it carries over to coyotes, black bears and raccoons,” he says, “The key to success is letting people know how to live with bears through education and outreach rather than dealing with the situation after a bear gets into trouble. Once a bear gets conditioned to humans, you can’t remove it far enough.”

Servheen also points to improving connectivity between tracts of bear-friendly habitat with crossing structures along highways and through private easements and land acquisitions, a key part of Vital Ground’s mission.

“Like Servheen, Chadwick also uses the term “umbrella species” to describe the role of a grizzly bear in the area where it lives. “It’s a charismatic animal, like Orcas in the ocean, that draws attention to its environment,” he says, “A bear’s range is big, and it uses every elevation from the valleys to the mountaintops. If you take care of grizzly bears, you protect the swans and glacier lilies, too.”

However, the size of a grizzly’s range brings a major challenge in conserving it. To thrive, bears need space away from humans, yet both bear and human populations are growing in bear country, sometimes encroaching on each other.

“If a place is big enough and wild enough for grizzlies, the water is clean and there isn’t as much disturbance. The rest of the wildlife community is likely intact and thriving. You can see wildflowers, bird watch and recreate outdoors... These are values we hold dear when we are in wild places.”

- Doug Chadwick, Wildlife Biologist, Author and Vital Ground Board Member
New Administrative Assistant Joins Vital Ground Staff

If you’ve phoned the Vital Ground office since May, it’s likely Kimberly Kozub answered your call. She’s also responsible for processing donations, assists the Lands Department with records, and helps manage and market our online store, Bear Mart.

Kimberly returned to western Montana in 2013 after spending seven years in Hawaii where she attended the University of Hawaii-Manoa and worked in film production on various television shows and movies. She spent her childhood exploring the mountains, creeks and rivers of the Bitterroot Valley, kindling a unique love for the natural world. She is passionate about conservation, film and photography. Kimberly enjoys spending her free time hiking and camping, where the natural world continues to be a source of creative inspiration.

New Land Steward Hired

Mitch Doherty joined Vital Ground in October as our new Land Steward. Mitch’s core duties include maintaining Vital Ground’s conservation easement and fee-title stewardship programs, physical inspections, reporting, and he responds to landowner inquiries.

Growing up in rural Wisconsin, Mitch has developed a sense of place working in the family woods and fields of the glacial Kettle Moraine area with his grandfather and father. He held onto that passion, which resulted in a degree in geography with an emphasis in environmental management and analysis from the University of Wisconsin-Oshkosh.

Welcome Kim Davitt, Vital Ground’s New Conservation Initiatives Manager

When Kim Davitt first came to Montana after college on the East Coast, she earned a master’s degree in history of the American West at the University of Montana and started exploring the mountain ranges and rivers of the Northern Rockies. She has worked on wildlife connectivity, large landscape conservation and public health/climate change issues in the region for the last 15 years.

Most recently, she coordinated the Roundtable on the Crown of the Continent, a transboundary collaboration promoting culture, community and conservation across an 18-million-acre landscape.

Kim will work with staff, donors, conservation partners and trustees to advance Vital Ground’s philanthropy programs and support conservation goals. She lives in Missoula, Mont., with her husband and two children and is also an extraordinary huckleberry picker.

The mission of Vital Ground is to protect and restore North America’s grizzly bear populations by conserving wildlife habitat for future generations.
Help Save Spaces for Grizzlies, Wildlife and People

A planned gift is the most personal way to help save places for grizzlies and the many species that share their habitat – and it ensures that your wildlife legacy will last forever. To help ensure the future for what you love, remember Vital Ground in your will or estate plan.

For more information call Kim Davitt at (406)549-8650, or visit Vital Ground at: http://www.vitalground.org/how-you-can-help/planned-giving/
Wildfire hit Vital Ground in the summer of 2015. Located on the eastern edge of the Selkirks four miles south of Canada, our 43-acre Weiler Property—donated by Sig and Anne Weiler in 2005—burned comprehensively in the Parker Ridge Fire that torched more than 6,500 total acres.

Since the fire, we've been hard at work ensuring that a healthier forest will replace the one that burned. Contracting with Inland Forest Management of nearby Sandpoint, Idaho, Vital Ground has planted 8,100 new trees on the property, seeking to restore the land to hosting a fire-resistant mixed canopy of native western larch, western white pine, and ponderosa pine. A recent visit to the parcel revealed prolific regrowth in the understory, an important first step in land’s return to providing connective wildlife habitat on the edge of the Selkirk Grizzly Bear Recovery Zone.

Photos by Kevin Rhoades
The #WhyVitalGround survey was emailed to donors, shared on Vital Ground's social media platforms, and posted to our website. This gave the Vital Ground community a platform and opportunity to share what they thought was special about Vital Ground, what makes us stand out among other conservation foundations, and why they contribute to our cause. We received 62 submissions, all providing excellent feedback as illustrated by the following comments and the accompanying "word cloud" graphic, which gives greater prominence for words appearing more frequently in responses.

We have been astounded by not only the number of people who wrote, but also by the level of passion for conservation in your responses.

Our mission can only be accomplished if there are still people in this country who care about conserving vast, open spaces where grizzlies have lived for millennia, and it is certainly clear that the Vital Ground community is dedicated to keeping our wild places wild.

"Vital Ground takes a long-term holistic approach to conservation. It is one thing to save an animal or protect it, it is another to guarantee it has a place to live and thrive. Well done to Vital Ground for being very pragmatic in their approach. I wish many of the conservation programs out there, particularly in Africa, would take the same approach. Coupled with their education programs, this program presents the strongest potential for the survival of multiple species, and I am proud to support it."

—Clarissa Jonas

The mission has been set before us – to conserve enough land so grizzlies can thrive – and Vital Ground could not accomplish this huge undertaking without the support of each and every one of our donors and supporters.

"Grizzly bears symbolize wild nature in its purest form. Vital Ground is working to conserve and protect the essential habitat these magnificent animals require to maintain healthy, sustainable wild populations. The grizzly bear is truly an "umbrella species." By ensuring a bright future for the grizzly bear, Vital Ground is also ensuring that diverse plant and animal communities can thrive across large landscapes, now and for decades to come. If we lose the grizzly, the human spirit will be forever diminished. I support Vital Ground personally because I know I cannot face the prospect of losing such a majestic, powerful and critically important part of wild nature."

—Steve Hoffman
Montana Audubon Society, Executive Director

We now know why Vital Ground is "vital" to you – and we want you to know that you are "vital" to us. We have read every word, and appreciate your input, as the Vital Ground team continues to cultivate an organization that benefits land, wildlife and people.

—By Adrienne Ingram
Of Bears and Berries

Glacier National Park Researcher Hopeful That Huckleberry-Monitoring Project will Help Predict Bear Activity

By Tristan Scott of the Flathead Beacon

Note: This 2015 article appeared first in Montana’s Flathead Beacon. Since research is expected to continue through 2017, we thought this topic would interest our readers. An update by research ecologist Tabitha Graves is provided at the end.

For Tabitha Graves, the ability to presage a bumper crop of huckleberries – or, conversely, a dearth of the delicious fruit – carries far greater implications than merely filling up jam jars or homing in on a secret picking patch.

Graves, a research ecologist with the U.S. Geological Survey’s Northern Rocky Mountain Science Center in Glacier National Park, is in the second year of a pilot program aimed at tracking the timing and productivity of huckleberry patches, which this sultry summer are bearing little fruit at lower elevations.

She won’t hazard a guess about the overall upshot of this season’s crop, though of the five monitoring sites she’s able to compare to last year’s data, only one is on par with the previous summer, which sprayed a veritable star-scape of the dark-red berries throughout the forests that hug the Continental Divide.

Wild huckleberries grow in droves on both sides of the Continental Divide, their tart flavor sought out by humans and grizzly bears alike. And while visitors to Glacier can pick one quart of huckleberries per person...
per day for personal consumption only (Waterton Lakes National Park only allows hand-to-mouth picking) grizzlies and black bears eat pounds of them in a single sitting.

Last summer was a good year to be a berry-eating bear, particularly as research has shown that 15 percent of a bear’s diet is made up of huckleberries, a fun fact gleaned from a not-so-fun research study – scat analysis.

The berries provide essential nutrients for bears, and if you’ve ever hiked trails lined with huckleberry bushes in Glacier Park, you have probably stepped over piles of berry-loaded bear scat.

And yet, for a species as popular as huckleberries, little is known about its phenology – in other words, its cyclic, seasonal behavior and how it’s affected by habitat and variations in climate.

“For a species as iconic and charismatic as the huckleberry, a plant species that’s probably as charismatic as a grizzly bear, there’s not much published research,” she said.

And, as the scat analysis revealed, bears and berries have an intimate relationship.

If Graves understands the seasonal variables that produce a hulking harvest of hucks like last summer, when a cool, wet spring yielded a hot July and a kaleidoscopic crop of berries emerged, she’ll be able to better predict bear behavior and better inform public land and wildlife managers. Ultimately, she envisions a predictive modeling map to analyze huckleberry production and bear behavior, similar to how fire ecologists predict fire behavior.

To remedy that, she’s set up remote cameras at 12 huckleberry-producing sites in Glacier Park, selecting them for their variability in elevation and canopy cover, among other factors. During the growing season, the cameras snap photos of the huckleberry shrubs from about 18 inches away, five times a day, and Graves watches as the plants bud and produce tiny, pale-pink urn-shaped flowers that turn into saucers and produce green berries that, when ripe, turn a blackish, purplish red.

Last year, Graves monitored five sites compared to the dozen sites she has her eye on this year. That’s how she knows that at three sites, the plants are bearing 25 percent of the berries as the previous year, while one site is producing just 5 percent of last year’s yield.

“The lower-elevation sites are producing fewer berries this year, but that doesn’t mean that it’s going to be a bad year at the higher-elevation sites,” she said. “They could still be really good.”

Graves is the first to concede that the study has generated more questions than answers about huckleberries, and that’s fine by her. Depending on funding, Graves hopes to have 200 cameras monitoring huck sites throughout western Montana, focusing on the Northern Continental Divide Ecosystem’s bear population as well as British Columbia and Alberta, Canada.

At the Salish Kootenai College, a student in the wildlife program is monitoring 10 huckleberry sites, and Graves recently received funding to develop a citizen-scientist app that allows visitors to the park to upload photos and information about huckleberry patches from their smartphone to a National Park Service database.

For Graves, the kind of numerical, quantitative data set such information could produce is invaluable as she tries to better grasp the phenology of huckleberries.

There’s no question about Graves’ commitment to and enthusiasm for the research, however, and her effusive personality has led her to corners of the huckleberry world she didn’t know she’d be exploring.

Tent caterpillars are a problem at one of her sites, noshing the leaves of the huckleberry bushes and inadvertently destroying the berry-producing flowers. The spotted-wing fruit fly, an invasive species introduced in 2011, could also pose a threat, so she’s capturing them in flytraps.

“There’s still a lot to learn,” she said.

The Latest on Bears and Berries

The dry summer of 2015 led to smaller berries at all of the 16 productivity sites, low productivity at low elevation and highly variable productivity at moderate elevation sites. In 2016, the team collected phenology data at 18 phenology sites and 17 productivity sites in and near Glacier National Park.

Janene Lichtenberg, with Salish Kootenai College, also collaboratively led data collection at 10 sites on the Flathead Reservation. Sampling intensity in 2017 will depend on availability of funds. The Glacier National Park Conservancy has listed the huckleberry project for donations.
I f a countryside can still support grizzlies, it will be good and whole and rich and wild and free enough to support all the other creatures struggling to hold on to a place in this world.

The Vital Ground Foundation’s mission is to protect and restore North America’s grizzly bear populations by conserving wildlife habitat for future generations. In support of this mission, we:

- Protect lands that grizzlies need to survive, not only for bears but for all other species that share their world;
- Work where private lands and human impacts meet some of the wildest places left on the continent;
- Target projects that conserve critical lands, sustain habitat connections, and reduce conflicts between bears and people;
- Ground our projects on current science and strong collaborative partnerships.

Has your email or mailing address changed? Please let us know!

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GRIZZLY BLEND COFFEE
by Montana Coffee Traders

Grizzly Blend is a full-bodied, medium-roasted coffee. Vital Ground receives $1.00 for each pound of Grizzly Blend purchased.

PRAIRIE THUNDER RED WINE
by Ten Spoon Vineyard + Winery

In tribute to Montana’s magnificent grizzly, we’ve crafted a rich, Syrah from organic grapes grown at Harold Pleasant’s Vineyard in Prosser, Wash. Full-bodied with notes of chocolate, tobacco and spice, Prairie Thunder rolls across the palate to a deep, bear-satisfying finish. 2014 Silver Medal Winner at the New York Finger Lakes Competition.

Prairie Thunder is available in retail shops across Montana, and can be shipped to other states where allowed.

Vital Ground receives $1.00 for each bottle of Prairie Thunder purchased.

The Vital Ground Foundation receives $1.00 for each bottle of Prairie Thunder purchased.

Grizzly Blend Coffee by Montana Coffee Traders

Grizzly Blend

Montana Coffee Traders

Prairie Thunder

Ten Spoon Vineyard + Winery

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