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Crystal Valley Environmental Protection Association

President's Letter

John Armstrong

Hallelujah! Our valley is rejoicing at the announcement that the Thompson Divide is protected from oil, gas and mineral development until 2044! (Check out <u>wildernessworkshop.org</u> for the details.) CVEPA has been a stalwart supporter of this15 year campaign. We are so grateful to the Thompson Divide Coalition and Wilderness Workshop who did the heavy lifting, in concert with others.

The Crystal Valley: live it, love it, defend it!

These are uncommon times. Challenge yourself to celebrate divergent opinion. It is also not as easy as we would hope. This week the Wilderness Workshop and Pitkin County Open Space and Trails found truce over the McClure Pass Trail vs the Carbondale to Crested Butte Trail. The latter is a regional trail proposal traversing sensitive areas within our valley and west of McClure Pass. Values at issue are man's inherent pedestrian right of passage through the valley, wildlife habitat protection and the processes we use to determine use of public lands. While most agree on the benefits of such a project the means of getting there are passionately debated.

Several subcommittees, spawned by the multi-year Wild and Scenic and Other Alternatives Feasibility Collaborative, are working to develop the best means to protect the Crystal River. Committee participants, residents and visitors of all ilks seek the common goal of protecting the river for posterity. How we achieve the protection is the source of debate.

President's Letter, continued

Everyone wants to safeguard our climate and destroy greenhouse gases. We all love our wild spaces and honor our public lands. Coal Basin is in the spotlight after having been exploited and damaged then deserted by extraction interests. Government agencies walked away from the bereft basin. CVEPA heroes pressured those entities and helped achieve an admirable reclamation of the environment. Now we are again heir to more "unfinished business" regarding environmental protection and public health. We, the guardians, are left with difficult and perhaps divergent decisions on stewardship.

It is ironic that we have an unprecedented number of environmentalists in our valley sharing common values but we are challenged with the nuances, variables, causes and effects of our actions. Through communication and respect, research and best available science, and yes, compromise, we will work together to produce the best results by melding the ideas of bright minds focused on a better tomorrow.

CVEPA Needs You!

For 52 years, CVEPA has worked to protect and preserve the natural environment of the Crystal Valley and its scenic resources. Our board members are actively involved in all issues impacting this area, and spend countless hours on stakeholder groups, committees and educational opportunities to provide a passionate voice on behalf of the environment of the Crystal River Valley. We love our home, we raise our families here, recreate here and take our jobs as stewards of this incredible place seriously. We research the issues and come prepared to debate topics that will impact this place far into the future. Did you know that CVEPA is the only environmental watchdog group focused solely on the Crystal Valley?

We are grateful for our members because they allow us to continue this mission!

If you have never been a member of CVEPA, we welcome your support and look forward to getting to know you. If you have not yet renewed your membership, please consider doing so. Contact us at cvepa@outlook.com and we will be happy to chat with you about it, or answer any questions about when you last donated.

Please donate at <u>https://cvepa.org/cvepa-membership</u>, or just click on the box below!

Make Your Donation Today!

A Conundrum, Pure and Simple

John Armstrong

The news of the massive methane leaks emanating from the abandoned Coal Basin Mine above Redstone four years ago was shocking to many, but not to all. Anyone familiar with the Mid-Continent Coal and Coke (MCCC) mine knows that it was one of the most gaseous mines in the West. The horrific gas blast of April 15, 1981 killed 15 miners and put Redstone in the national spotlight. Giant turbine fans sucking gas out of the mine and into the atmosphere ran 24/7 and could be heard down in distant Marble Valley. When MCCC declared bankruptcy, "sealed" the mines, turned off the fans and walked away the gas did not stop flowing.

Although common knowledge to many "old-timers", the figures that emerged in 2020 riveted local attention. Methane gas is a heat trapping gas 84 times more potent than carbon dioxide over a 20 year period and contributes to more than 25% of current global warming. Those figures are universal but when it was announced that Coal Basin gas leaks were equivalent to the entire carbon footprint of Pitkin County and could be mitigated, that captured local attention!

So from where did this sudden focus appear? Enter Dr. Chris Caskey. Caskey is a Paonia based environmental entrepreneur with a passion for climate change study. (Caskey is also the founder of Delta Brick and Climate Company which turns Paonia Reservoir clay into tiles and pavers). Dr. Caskey has been very involved in the methane capture and electrical generation at the abandoned mines in nearby Somerset, CO. That innovative project was sponsored by the Aspen Skiing Company as part of their "Protect Our Winters" environmental initiative. Within approximately five years the Ski Company recouped their initial investment through power generation. In his research, Caskey found the estimated figures of the Coal Basin leakage. He dug deeper.

State entities, the Environmental Defense Fund, the EPA and Pitkin County all recognized high volumes of methane were flowing out of abandoned mine portals and fractures in the shale slopes. The estimate was equated to the entire carbon footprint of Pitkin County. This piqued local interest.

The figures inspired the local Community Office of Resource Efficiency (CORE) to unite with Caskey. The two have been integrated partners almost since the inception of the project. Dr. Chris Caskey wants the effort to be "a community driven project". The group has held community forums periodically throughout the process.

Pitkin County and the federal government have contributed significantly to the research effort to determine just what the reality of these emission claims is. So did the benevolent neighbor in Coal Basin, the Catena Foundation. Catena has a large investment reclaiming the abandoned base operations area of Mid Continent Coke, commonly known as the wash plant. Catena transformed the industrially devasted area "into a silk purse from a sow's ear" by cleaning ponds, planting trees and developing a system of bicycle trails which they have opened to the public. The Foundation issued a grant to well-respected CSU professor Joe Von Fisher to study the emissions in the basin. The Crystal Valley Environmental Protection Association (CVEPA) had insisted on a second opinion early in the project and was pleased when Von Fisher was empowered to research the claims.

The summer of 2023 saw an intensive effort by both entities to locate, evaluate and quantify the methane leaks and assimilate that data. Through aerial drones, fixed wing aircraft and extensive on ground instrumentation (moved bi-weekly by horseback and volunteer backpacking) both scientists derived data that essentially corroborated each other.

At the end of the research season the original prediction of 10,000 metric tons of methane was found to be less than 25% of that. The guesstimate that equated the amount of methane to the entire carbon footprint of Pitkin County is more likely around 1/3 of that footprint. What is this in layman's terms? The project could mitigate the emissions of approximately 8,000 passenger car trips in the Roaring Fork Valley annually. Is the destruction of this amount of methane worth the potential damage to Coal Basin itself? What would be the environmental cost to water quality, wildlife habitat, recreational values and general quality of life? (Not to mention deference to past CVEPA volunteers that spent countless (wo)man hours reclaiming the ravaged basin!)

CVEPA sat with Dr. Caskey, colleague Mona Newton and CORE's John Dougherty last week to discuss finer details. Erosion, sound pollution and environmental concerns were the tip of the iceberg as, together we dug deeper into what gas mitigation would truly encompass. Caskey opined that CVEPA was asking questions that the Feds hadn't even requested. Moving toward a National Environmental Policy Act decision, CVEPA remains engaged and vigilant.

A CVEPA board member, an engineer, will remain on a technical review committee. Educate yourself on this issue at aspencore.org/coal-basin-methane-project.

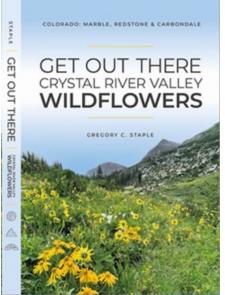
How can we benefit our climate and quality of life and protect the environment of Coal Basin? The answer is neither black nor white, equivocal or Crystal Clear.

New Wildflower Guide Focuses on Crystal River Watershed

Greg Staple, Guest Columnist

The following article is adapted from a new wildflower guide authored by Gregory Staple, a CVEPA member, who lives near Marble. The 310 page guide, titled <u>Get Out There Crystal River Valley Wildflowers</u>, features the author's original photos of over 260 different flowering plants growing in the Crystal's watershed. The book, to be published this Summer, also includes a 48 page botanical primer and planning maps for ten flower-rich local hiking trails.

Look for copies in area shops and book stores. Visit <u>www.GotWildflowers.com</u> for more information.



Seeing Wildflowers: Walk the Seasons and Learn to Kneel

I wrote this guide for the curious. Henry Thoreau put it this way: "The question is not what you look at... but what you see."

But what we see is shaped by what we know and believe. We see with our brains, not our eyes. Our ability to identify what we are looking at — whether it's a desired bloom in a field

of flowers or a thoroughbred in a crowded stable — stems from what we have learned or experienced. That's why the early pages of the guide offer some tips for looking at wildflowers and where one might find a desired species.

Most species have a niche, an ecological sweet spot that they have successfully exploited to out-compete other plants. So, whatever the elevation, I like to look for niches. They're often at the edges of a habitat: in between sun and shade, in forest openings, in rocky nooks and crannies, along stream banks and where one habitat abruptly gives way to another.

Learn to track the cycle of blooms. Plants have a predictable rhythm. They follow the sun and seasons. Walk the same trail at regular intervals as spring turns to summer. Frequent short walks at different hours of the day, and in succeeding weeks may be more rewarding than arduous day hikes.

Flowers change their appearance with the light, weather and season. The same plant also may look quite different in a novel habitat due to its surroundings, the type of soil, exposure to sunlight, moisture or genetic variation. Pale blue petals may shade to purple and violet at higher elevations (flax and gentians are but two examples).*

Similarly, some flowers (Yarrow, Rockcress, Penstemon) routinely vary from white to pink to lavender. Familiar trails can yield the most unexpected treasures. Discovery may simply turn on when you pass.

It usually pays to hike early, watching petals unfurl

with the sun's arc. I like to gain elevation as the days lengthen and follow the melting snows upward as forested mountain paths open to alpine meadows.

Learn to see. Look beyond a flash of color to the whole plant. See how the flower, leaf, and stem are arranged and how the parts work. Look for patterns in the petal counts and structure of the flowers. Observe the leaves: are they simple or compound, smooth or toothed? With blooms, work from the outside in – from bracts, sepals and petals, to stamens and pistils. Get close. Take a small hand lens on hikes. Observe attentively to remember distinctly.

There's often no need to walk far. Look low and slow instead to uncover a hard-to-find species. Learn to kneel. Peer under those shrubs; brush away some of that leaf mulch.

Practice naming what you find; it can give you an inner voice that quietly reinforces your personal memory bank, calling out the known and flagging the unfamiliar for research. Walking and naming.

Learn to roam. Meandering has its benefits, walking off-piste where habitats allow. Follow in the footsteps of Carl Linnaeus, the father of our botanical nomenclature. He was known to have an uncanny ability to find variety on ordinary grounds. He walked, he said, as a man might plow, "along and crosswise, back and forth, one of my paths ran hardly further than the other by two feet." But use caution: Alpine vegetation is especially fragile, and leaving a path in these climes can easily damage just what you are seeking.

Lastly, learn to go wild. Watch the pollinators and forage like an insect. Where did that butterfly land? Where did that bee-fly go? Discover the hidden structures of a flower as if your next meal depended upon it. Where is the pollen? Where is the nectar? If I were a hawkmoth, where would I fly next?

*Increased production of color-producing anthocyanins, which can protect flowers from UV light damage, may account for deeper blue-to-purple hues at higher elevation. Blue flowers may also appear more vibrant because blue light, which has a shorter wavelength than red or yellow, is more widely scattered at higher elevations. That gives the sky a richer blueish tint, causing blue flowers to appear more vibrant.

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Defined by Cow Patties

Larry Meredith, Guest Columnist

This article originally appeared in the "Denver Post" as part of the "Colorado Voices" series.

Drivers on Western Slope roads in the spring and fall often encounter herds of cattle being driven to or from the high country.

Inevitably, the residue of their passing is readily apparent.

Not long ago, a newspaper published a letter from a resident who complained about the resulting smell and the mess it left on her car.

The odor has the smell of history in it. The complaining letter's scent reflects some of today's reality on the Western Slope. Neither is especially bad.

Traffic jams near the small towns here are often the result of those herds of cattle being patiently prodded by cowboys and cowgirls from summer range to winter feeding, and back again in the spring.

They are who we used to be. They represent the ranchers, miners, farmers and merchants of the Western Slope of the recent past.

Today's ranchers follow many time-honored methods of raising cattle, with an added touch of technology that helps them with business plans and keeping cattle healthy.

But it's a difficult, thankless, smelly, cold-in-winter, hotin-summer kind of job that doesn't pay well and has as many ups and downs as the West Elk Mountains.

Still, they see a lot of beautiful sunrises and sunsets, they live in some of the finest country on Earth, and most of them seem pretty happy with who and where they are.

And now and then they have to crowd their cattle to the side of the road so a line of cars can get past. Give 'em a wave and they'll wave pleasantly back.

Many of the drivers of those vehicles represent who we've become. We're transplants from cities, and an awful lot of us are in a doggone big hurry.

Thanks to technology, the world's business can often be as easily transacted from almost anywhere on the Western Slope as from Denver. That fact alone has transformed the West Slope from a secluded, snow-covered headwaters region into an accessible, snow-covered headquarters for business and commerce of all kinds.

Consider, for example, that at Western Colorado University in Gunnison, every state in the nation is represented among its 2,500 students, and that from Crested Butte, 30 miles to the north, million-dollar deals are made over cellphones, the facts cemented via e-mail and the contract faxed for a signature.

Oh, the ranchers and a few miners are still here, thank God, and the merchants still work hard to meet their needs. Other working people keep the economy moving by providing goods and services, meeting health care needs and educating our kids.

But many main street shops serve another clientele. Yesterday's carriage shop has become a trendy coffee shop or a boutique stocked with exotic and rare perfumes and a gaggle of doodahs that appeal to all of us.

Nothing wrong with that. Businesses emerge to meet demands.

The point is that Colorado's Western Slope (like much of the interior West) has become home to an engaging and wonderful mix of people representing a world of cultures, lifestyles, personalities and aspirations.

The ranchers recognize this and they love their cellphones and digital satellite television as much as the rest of us.

The changes that have overtaken this part of the world may have affected them and their approach to life more than anyone. To survive, many are having to sell part of their land, likely to be divided into 35-acre ranchettes.

But cattle can move only so fast and there are few routes from the high country to river-bottom pasture land that don't require some time on a highway.

And if there's some cow poop on the road after they've passed by, some of us like the smell because it helps us define who we used to be and takes us away, for a moment, from who we've become.

Larry K. Meredith retired from Western Colorado University in 2014 as Assistant to the President and served four years as Director of the Gunnison County Library District. He is the author of "This Cursed Valley" and two other books. Meredith and his wife Ally are now residents of the Crystal River Valley near Redstone. They are the parents of CVEPA board member, Suzy Meredith-Orr.



Annual Meeting in August!

There's nowhere we'd rather be in August that the cool and beautiful upper Crystal Valley. Lucky for us, that's exactly where CVEPA will be for its annual meeting!

Join other CVEPA members and friends at the Raspberry Ridge Café and Inn in Marble on Sunday, August 25.

Whether you'll be there for Slo Groovin's excellent chow, to listen to a fascinating guest speaker, to find out this year's recipient of our Founder's Award, or just to hang out with other environmentalists, it doesn't matter to us. We just want to see you!

More details forthcoming via email in the next few weeks.



The "Crystal Clear" is published quarterly by the Crystal Valley Environmental Protection Association, a 501c3 organization. CVEPA has been the environmental watchdog of the Crystal Valley since 1972. Past issues of the "Clear" are available at cvepa.org/newsletters

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As a grassroots non-profit organization, we rely on your support to help us protect the Crystal Valley. Please consider becoming a member by visiting https://cvepa.org/cvepa-membership



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