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USU President Brad Mortensen and his wife, Camille, during a visit to the Utah State University Moab Campus. ***Photo by Levi Sim.***

THE REACH OF OUR MISSION

With our land-grant mission and statewide educational and Extension sites, Utah State University truly serves all of Utah. During my first year in this role, it has been incredible to see the Aggie impact through the entire state.

From research to recreation, this issue of *Utah State Magazine* focuses on that impact, highlighting new teaching methods, the importance of honoring tradition, and statewide Aggie conservation efforts.

Those efforts include work to preserve the Great Salt Lake by eradicating invasive, water-stealing weeds, led by Scott and Mindy Pratt, graduates of the S.J. and Jesse E. Quinney College of Agriculture and Natural Resources. Other stories explore the importance of rangelands in the state, as well as the impacts of burn scars on the environment — something especially important after one of the worst wildfire years in Utah's history.

Even with an important focus on these critical environmental issues, the beauty of Utah still takes my breath away. One of my favorite features in this issue shares feedback from students throughout the state about some of their most beloved outdoor recreation spots. Many of them are now on my list for future exploring.

Beyond our state's borders, Aggies are making an impact as well. College of Engineering graduate Dustin Mortensen is literally changing the map in Texas, where the dam project he led has begun filling, creating a lake that will last far into the future.

Stories like these are a reminder of the breadth of Utah State and the many ways Aggies are putting their education to work. Whether through research, teaching, service, conservation, or simply finding new ways to strengthen the communities where they live, our students and alumni continue to carry the Aggie spirit far beyond our campuses.

That statewide reach is central to who we are as Utah's land-grant university. Our responsibility is not simply to educate students, but to use our knowledge and expertise to help address the challenges and opportunities facing the communities we serve.

I hope you enjoy this issue and the stories of Aggies who are making a difference across Utah and beyond. Thank you for being part of the Utah State community and for helping carry our mission forward.



Managing editor Tim Olsen (far left) with his family at Lake Powell in July 2026. ***Photo by Elizabeth Olsen.***

LESSONS FROM THE LANDSCAPE

When I was 16 years old, I hopped into a truck with my dad and grandpa and headed to Lake Powell. It was during fall break, so it was mid-October and the weather was gorgeous — days in the mid-70s to low-80s with the water still retaining much of its warmth from summer.

I'd previously visited Lake Powell on houseboat trips with my extended family, but for this excursion it was just the three of us and a 1985 Sun Runner. It had a small cabin area where my grandpa slept while the captain's chair and passenger chair folded down into benches that my dad and I slept on.

We put in at Bullfrog Marina and spent the next few days motoring around the lake, fishing, and sightseeing. We visited Forgotten Canyon and the ancestral Puebloan dwelling tucked along its cliff walls known as Defiance House.

It was an incredible trip.

And while this wasn't my introduction to recreation and time spent outdoors — I grew up exploring many of the outdoor wonders Utah has to offer — it was an experience that really hammered home our state's ancient history, the human impact and role of water on a landscape, and the importance of responsible recreation.

In the decades since that trip, that sense of responsibility has only grown. The Lake Powell that I grew up visiting is not the Lake Powell my children now experience. It's still incredible, just different. There are many challenges and pressures facing our state, but there is also incredible research being done and care being taken in the face of those challenges.

As Utah's second worst fire year on record winds down, Utah State researchers are working to better predict the hazards, such as flash flooding, wildfires leave in their wake. Research is also taking place to better understand the challenges facing Utah's big game animals — moose, elk, and deer — as a changing climate, along with parasites and diseases, pose threats.

Outside of the state, it was fascinating to hear about College of Engineering graduate Dustin Mortensen's experience building a dam in Texas and the impact it will have on the area for both recreation and water access for decades to come. That interview also opened my eyes to the Utah Water Research Lab's impact over the years, where their models have saved millions.

It was exciting to talk to current students and recent graduates from USU's Outdoor Programs. While the opportunities provided to both Utah State students and the public through their services are incredible, what was truly amazing to hear about is the leadership experience and management skills gained by the program's trip leaders.

And finally, I loved hearing from USU's student leaders across the state and learning about some pretty unique spots in places our Aggies call home. Go Aggies!

Timothy R. Olsen '09, '18 MBA
Managing Editor,
Utah State Magazine



SHARE YOUR AGGIE PHOTOS for a chance to win some USU swag!

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Senior Azeri Coby is a former national champion Indian relay racer following in the footsteps of his father and grandfathers while still forging his own path.

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The 1935 valedictorian and class president, Eugene Gardner, a Logan native, went on to become an atomic physicist and co-discoverer of the meson.

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Photo by Levi Sim.

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ON THE COVER:
USU sports 30 locations across Utah to provide access to education, but its students also like to get out and explore the state around them. Check out some of their favorite spots.
Illustration by Liz Lord '04.

Weeks of Welcome

By Timothy R. Olsen '09, '18 MBA

Few things on the Utah State University campus indicate that fall is on the horizon more than the trickle of students turning into a full-on torrent. As summer wanes and the campus population explodes, the new arrivals are met with a barrage of events unmatched for the reminder of the academic year — Weeks of Welcome.

Yes, you read that right. Weeks. Plural.

The annual campus kickoff runs through the first two weeks of the fall semester and includes events like Day on the Quad where more than 300 on- and off-campus vendors fill the iconic center of USU's campus with information booths, food, and an overwhelming abundance of prizes and giveaways.

"Weeks of Welcome is a long-running series of events and activities that continues to be loved by students," explains Kevin Webb, director of leadership for USU's Student Involvement and Leadership Office. "It's a great way for them to gather with new friends, make memories, and relax a little during the busyness of those first few weeks of the semester."

This year's iteration paired the popular Big Agg Show, a multi-band outdoor music festival sponsored by Aggie Radio 92.3 FM, with the HURD's annual campout on the Quad in preparation for Utah State's first home football game of the season.

The fun continued in Week 2 with a movie on Old Main Hill as *How to Lose a Guy in 10 Days* entertained the masses. The ensuing day, the women's soccer team delivered in the "Battle at the Bell" as the Aggies throttled No. 13 BYU, 4-0, in front of the stadium's first-ever sold-out crowd.

Other highlights of the week included High Stakes Bingo, Poetry and a Beverage (PoBev), a color run, Glow in the Dark Disco, and various other events. **A**













From the Luminary to the HURD campout on the Quad and the Big Agg show, USU's Weeks of Welcome is a campus-wide celebration to kick off the fall semester each year. ***Photos by Levi Sim, Mateo Cervantes, and Abigail Frandsen.***



Adventure Awaits!

OUTDOOR PROGRAMS HELPS AGGIES FIND ADVENTURE, COMMUNITY, AND CONFIDENCE

By Timothy R. Olsen '09, '18 MBA

A fractured ankle is not a pleasant experience. And attempting to drink water so gunky that it renders filters nonfunctional isn't on most people's bucket list.

But if you ask Kirstie Kandaris about the impact working as a trip leader for USU's Outdoor Programs had on her Aggie experience, her excitement can hardly be contained.

"I knew I would like it, and I have absolutely loved it," Kandaris gushes. "I met a ton of really wonderful people and learned so many valuable skills. It made what was already a good master's experience into something really, really memorable."



Kirstie Kandaris was a trip leader on a Lake Powell kayaking excursion for USU's Outdoor Programs this past spring when she broke her ankle in the back of Moqui Canyon. Despite that setback, or possibly because of it, that was one of her most memorable trips. *Photo by Kirstie Kandaris.*

It was certainly memorable this past spring when Kandaris snapped her right fibula during a kayaking trip to Lake Powell — her last as a trip leader for USU.

Her group had spent Saturday playing around the sand dunes in the back of Moqui Canyon and was hiking back to the kayaks to return to camp and prepare dinner. While the group was walking down a small muddy hill, her right foot sunk in the mud causing her to lose her balance. When she stepped with her left foot to catch herself, it slipped, but the right foot stayed planted in the mud.

Snap!

Despite that setback, it didn't take away from Kandaris' moment.

"When I was an undergrad, the first trip I went on was a kayaking and Lake Powell trip," she remembers. "And then that was the last trip that I led, so it was just kind of a cool, like full circle moment."

Originally from Salt Lake City, Kandaris earned a bachelor's from the University of Utah where she discovered their Outdoor Adventures program and "went on a ton of trips." Upon her arrival in Logan to pursue a master's in ecology, she immediately connected with Outdoor Programs and knew she wanted to take her involvement a step further.

Where she'd been bogged down by working multiple jobs and running student organizations during her undergraduate studies, her time at USU — while busy — provided the flexibility necessary to take on the role of a trip leader.

It's a role that not only provided Kandaris an opportunity to spend time outdoors and pursue her passions, but one that supplied her with skills she says will benefit her throughout her life.

"It's a very different dynamic than somebody that you sit next to in your chemistry class. You get to know people a lot better, and you form deeper, more meaningful relationships," she says. "Different people respond differently to different tactics, so just being able to read people and talk to them and see what their needs are in that moment, and how to accommodate them accordingly, is really important."

A Winding Road

Outdoor Programs — the artist formerly known as the Outdoor Recreation Center and Outdoor Recreation Programs — has been part of Utah State University for decades. Its purpose is to provide adventure and discovery to USU students while teaching them how to recreate

responsibly. But what used to be tucked away in the basement of the distribution building on the east side of the football stadium got a big visual upgrade when the Aggie Recreation Center opened just over a decade ago.

"Coming from the old shop in the forgotten north 40 of campus, we were kind of out of sight, out of mind," remembers Greg Davis, USU's assistant director for of Outdoor Programs who's been overseeing the program since 2013. "It felt like we really had to fight tooth and nail to for people to know we existed and what we did. The move here to the Aggie Rec Center — the heart of campus where we have students walking by every day, and we're in this great building — it definitely gave us a platform for growth."

And grow they have.

It's been quite a journey from humble beginnings as a small student club in the 1970s, to moving under the Campus Recreation umbrella with part-time staff member oversight in the 1980s, to the 3,053 square-foot space OP now occupies. In the 1990s, as part of that growth, the program expanded its operations from rentals to also include trips and outings for students.

For Matt Barry, a 2024 Outdoor Product Design and Development program graduate from Bend, Oregon, those excursions — along with the opportunity to work for OP — played an integral role in his success at Utah State.

"Outdoor Programs was really paramount to me staying at USU. It gave me a community of people who I became really close with, and it kind of gave me a purpose at USU outside of my academics," says Barry, who notes he had a hard time focusing on his studies in high school. "It was really critical to my academic journey that I had that space to go to and to work in, to challenge myself in a different way.

"And there was a good amount of crossover with my degree. I was doing a lot of trips and trainings in the field, being able to test these products and think of new product ideas that I could then turn into projects for my classes. So, they really went together really pretty well and set myself up for kind of my career trajectory."

That career trajectory included stints after graduation working for the U.S. Forest Service as a wildland firefighter back in Oregon and interning at the Utah Avalanche Center for a season. But in May 2025, Barry landed a job at Weber State University as a program coordinator over the Wildcats' adventure program and trip leader training — a direct reflection of his work at USU.

"I learned so much in those roles as a trip leader, learning how to work together as a team in these really dynamic, fast-paced environments where things can change instantaneously," Barry explains. "Learning how to problem solve on the fly, work with a small group, and really kind of rely on yourself and your team to make the right decisions. I think that taught me a lot, and those are transferable skills that I'll take with me throughout my career."



From a student club in the '70s to a more-than-3,000-square-foot shop on the ground floor of the Aggie Recreation Center, Outdoor Programs is committed to providing adventure and discovery opportunities for USU students while teaching them to recreate responsibly. *Photo by Levi Sim.*

Gear Up

Located on the north side of the ARC on ground floor, the OP rental shop provides myriad equipment for outdoor activities in all seasons. Want to give skiing, snowboarding, or mountain biking a try? They've got you covered. A weekend camping trip with friends? No problem. Tents, sleeping pads and bags, backpacks, and cooking gear — they've got it all, right down to the coffee pot.

Looking for a little more adventure? Climbing gear — shoes, helmets, and harnesses — can be rented for rappelling in Logan Canyon or a weekend trip to the City of Rocks. You can even rent 12-, 14-, or 16-foot inflatable rafts with all the necessary accoutrements to tackle the Alpine section of the Snake River or any number of aquatic excursions.

"We want every student on campus to participate … there's lots of groups of students that we still haven't seen come through our doors that we want to come through our doors," Davis says. "So, finding ways to connect with and provide opportunities for them [is important], but the growth has been great."

Though located on campus, this equipment is available for rent by anyone — staff, faculty, community members, and students alike. However, USU students are incentivized with a helpful 35% discount. And while they can rent the equipment to pursue the activities on their own, OP also offers outdoor-adventure based trips.

Recent fall trips included Logan Canyon rock climbing, City of Rocks climbing and camping, Labyrinth Canyon canoeing, and Moab rock climbing and mountain biking. Upcoming trips include Canyonlands backpacking, Oct. 15-18, and Lake Powell kayaking during the first week in November.

All told, Outdoor Programs organizes roughly 40 trips each year, and while these trips certainly include enjoyment for all skill levels, the goal is to remove the barrier to entry for participation as much as possible.

"They make it really affordable for students," Kandaris emphasizes. "Even if you don't have basic camping gear, they can supply all of that for you. They just make it very approachable. As soon as I found out about it, I recognized what an amazing opportunity it was and was just registering for all the trips that I could. Especially the more technical ones I could never afford to do on my own or wouldn't feel safe doing on my own.

"It's a riot. It's so fun. The activities themselves, you know, the adrenaline rush and learning how to do this new skill that's amazing. But then there's also the camaraderie of it. You make different friendships camping with somebody and rafting with them — doing these cool outdoor activities."

Sharing is Caring

Echoing Kandaris' assertion that the trips have something for all skill levels, Devon "Devo" Derby says he always learns new things despite an abundance of outdoor recreation experience.

Now in his mid-30s, Derby returned to school to pursue a second bachelor's degree and become a pilot. He's also dual majoring in aviation management and just kicked off his second year as an OP trip leader.

He initially graduated from Georgia Southern University in 2013 with a degree in outdoor recreation management, which led to work as a guide in Colorado for a program called Warrior Adventure Quest. Basically, Derby was a civilian employee who would take Army units coming back from deployment on excursions that "introduced soldiers to safe, adrenaline-induced activities, offering positive alternatives to common challenges faced both after deployments and in everyday life."

This included activities like whitewater rafting in the summer, mountaineering in the fall, and skiing or ice climbing trips in the winter.

Derby then spent time guiding on his own, focusing on climbing and skiing, and even becoming an athlete manager for Adidas. When COVID hit, though, he shifted gears again, serving in the U.S. Coast Guard, before landing at Utah State. As a trip leader, he brings an abundance of experience and enjoys passing on the skills he's picked up during his journey.

"One of my biggest things is to be able to turn around and teach it," Derby exclaims. "There's no sense in having all the experience and background that I have, and the pursuits that I've chosen to do, if I can't share them with somebody else."

So, whether it's your first time in the woods or you're a seasoned outdoor adventurer, there's one thing Derby, Kandaris, and Barry all agree on. The relationships built — both amongst themselves as trip leaders and the student participants — are enduring. As are the skills they learn along the way.

"To see the growth and the development, and mostly just see the friendships that form is like the coolest thing in the world," Davis emphasizes. "That's probably my favorite thing to see and gives me the most satisfaction in this job … that end result is what really makes it worthwhile." **A**

THE Amazing Racer

USU's Azeri Coby Pushes the Limits in Indian Relay Racing

By Jeff Hunter '96

During the winter months, Azeri Coby can often be found out in the frigid cold and deep snow, launching off cliffs and traversing the steep backcountry of the Intermountain West on the back of a snowmobile with his daredevil friends and relatives.

But that feels like a very long way away on this early August day in Southeastern Idaho.

It's hot, dry, and dusty. The land at the Fort Hall Indian Reservation is so parched that from afar, a massive dust cloud created by a combine working its way across a nearby field is easy to mistake for smoke from a rangeland fire.

So, it goes without saying that on this scorching summer afternoon, Coby isn't relying on a Ski-Doo with a 165-horsepower engine to propel him to where he wants to go. Instead, the senior at Utah State University is counting on a mere three horses to help return him to glory on his home track.

"It's a relief, but I also feel a bit more stressed out than normal not knowing what's going to happen," Coby says, while carefully taping up his left knee and both ankles in a small compartment at the front of a horse trailer. "But I'm excited. I wasn't even going to race this weekend, but then my doctor looked at the ultrasound of my knee and said, 'Dude, you can race.'"

The 2025 national champion in the relatively obscure sport of Indian relay racing, Coby was sidelined for more than seven weeks by a knee injury suffered during one of the biggest races on the circuit, the Muckleshoot Gold Cup held at Emerald Downs south of Seattle. While he miraculously avoided a more serious injury while making contact with horses from another team during a particularly chaotic exchange, Coby was diagnosed with a sprained medial collateral ligament (MCL) in his left knee. Initially, the fear was that he would be out of action until the Indian Relay National Championship Races in early September at Blackfoot, Idaho.

But after being cleared to compete at the 61st annual Shoshone-Bannock Indian Festival on Wednesday, Aug. 5, Coby's physician gave him strict guidance on how to protect his injured knee from suffering further damage during his first heat on Friday, Aug. 7. After first wrapping his leg with a layer of kinesiology tape, Coby ironically adds a layer of horse bandaging tape to protect his ankles and help keep his knee from "bending inwards."

"I have to keep my knee wrapped at a 45-degree angle," he explains. "So, when you see me walking, it definitely looks like I'm limping."

But can he dismount from one horse and then run to another on practically just one working leg? As the jockey of an Indian relay team, Coby is required to switch horses as quickly as possible after each half-mile lap around a track. And since competitors ride bareback, there's no stirrups to aid the transition to the back of a horse. That means sheer athleticism and the ability to time a literal leap of faith is of paramount importance.

"I can still feel it, but only when making certain movements," Coby insists. "But it's not as painful as it used to be, so it's ready."

As he puts on the turquoise-colored vest of Teton Team — the relay squad founded by his grandparents, Clarence and Mary Teton more than four decades ago — Coby takes note of some fellow competitors walking nearby with their horses.

"Those guys are from Canada, dude. And they're the team to beat right now," Coby says of the Poitras Relay Team, which made the 1,000-mile, 15-hour trip from Meadow Lake, Saskatchewan, to compete in Fort Hall. "Those guys are tough; that's a good team. That's the one that I got hit by there in Washington when I messed up my knee. But we're all good. They're really nice people."

Coby won't go up against Poitras and its TikTok-famous jockey "Jumping Joe" Jackson in his first race back, but he does expect to see the frequently bare-chested Jackson in the championship round. At this year's festival, there are a total of 24 relay teams competing in four





ABOVE: On pace to graduate in December with a bachelor's degree in computer science, Idaho native Azeri Coby spends most of the summer and early fall focused on competing in the sport of Indian relay racing. LEFT: After suffering a sprained MCL in his left knee during a race in June, Coby was out of action for about six weeks before returning to the track with a heavily taped leg. *Photo by Levi Sim.*

different heats on Friday and Saturday. The teams finishing with the six best times then advance to the title race on Sunday.

Each team — made up of verified members of a federally recognized Native American tribe — is comprised of a jockey, two horse holders, and a fourth person called a catcher or mugger. The bareback rider must complete three laps around the track, switching to a fresh horse at the end of each lap in that team's designated exchange zone. As Coby was reminded in June, those transitions areas are extremely dangerous, particularly when a competitor's horse gets loose or doesn't want to cooperate.

But even though he's far from being fully healed from the injury he suffered when he was very nearly trampled by Jackson's horse, Coby is ready to once again display that same fearlessness he has demonstrated on a snowmobile since he was a little kid. After completing his look with an American flag headband and a pair of Oakley Meta smart glasses that will capture point-of-view video of the race, Coby and his five fellow competitors are off on the judge's signal.

After starting off in the middle of the pack, Coby is still in rather congested space at the first exchange. But thanks to his teammates and his leg holding up, Coby's transition between horses is nearly perfect, and he ends up in the lead after getting back out on the track. The second exchange for Teton Team isn't quite as pristine, but Coby barely manages to hold off JonMarc Skunkcap of Team White Knife and win the heat by nearly one full length.

"I really had to push my last horse because JonMarc and I were battling the whole time," Coby says of Skunkcap, a fellow Fort Hall native who ended up in the hospital after a horrific horse collision at the national championship races in 2025. "We were head-to-head going into the last turn, but that's when that horse really shines. He likes to start running his hardest at the end, so I wasn't too worried."

Afterwards, Coby and his team pose for a quick photo at the finish line while being lauded over a microphone by his father, Alonzo Coby, a former bull rider for the USU Rodeo Team. He's also the current president of the Fort Hall Indian Relay Association and serves as master of ceremonies for the festival races.

"As long as he doesn't say too much and stays unbiased, I'm OK with it," Azeri says

IT'S LIKE A RELAY RACE, ONLY THE HORSES ARE THE RUNNERS, AND I'M THE BATON.

— AZERI COBY

of having Alonzo talk up his performance to the fans in the stands. "He's obviously my dad, and he wants me to do well. But if he gets too biased, I'll tell him to stop."

Back in the shade of the Teton Team trailer, Azeri Coby gets a cool drink and starts removing a whole lot of tape as he ponders the rest of the weekend.

"I feel fine," he proclaims. "My leg feels really good. It's the weirdest thing, but my doctor said movement is key for healing the MCL. So, that's why I try not to sit around too much because that's when it starts hurting."

Relaying Information

Indian relay racing has a strong presence in the western United States — particularly Idaho, Montana, Oregon, Washington and Wyoming — while a whole other circuit can be found across the border in Canada. But even though numerous documentaries have been produced in recent years and the races were featured on a segment of 60 Minutes in 2024, Azeri Coby often finds himself explaining what is billed as "America's original extreme sport."

"If someone doesn't know what it is, I'll generally send or show them a video of it because it's so hard to explain," he says. "But the easiest way I've found to explain it is that it's like a relay race, only the horses are the runners, and I'm the baton."

That human "baton" grew up the son of Alonzo and Elise Coby in Lincoln Creek Valley, just east of Blackfoot, near







Despite an initial fear of horses, it's not surprise Azeri Coby ended up as one of the top Indian Relay racers. With a father who raced for 28 years and both of his grandfathers also competing, it's in his blood.







BOTTOM LEFT: Coby nears the first exchange of the championship race at the Shoshone-Bannock Indian Festival in second place. ***Photo by Jeff Hunter.***

BOTTOM RIGHT: Like his father, Alonzo, and his older brother, Billyzane, Coby enjoys extreme snowmobiling during the winter. ***Photo courtesy of Alonzo Coby.***







IT'S A VERY, VERY IMPORTANT TRADITION IN OUR FAMILIES THAT'S BEEN PASSED FROM GENERATION TO GENERATION … THE CULTURAL SIGNIFICANCE IS STILL HERE. IT'S BEAUTIFUL.

— Alonzo Coby

ABOVE RIGHT: While he didn't take to riding horses until he was a teenager, Coby grew up a bit of a daredevil on motorcycles and snowmobiles. ***Photo courtesy of Alonzo Coby.***

LEFT: While he competes in Indian relay races as part of Teton Team, Coby is establishing his own Rock Star Made brand when riding in other competitions. ***Photo by Jeff Hunter.***

the northern edge of the Fort Hall Indian Reservation. And despite being surrounded by Indian relay racing from the time he was born, Azeri insists he didn't plan on becoming a fifth-generation jockey and was traumatized by his grandfather's horses when he was young. But one day, he got "bored" while hanging out with a relative and decided to throw a bridle on one of his family's horses.

"He ended up running away with me on a sand hill, like literally running. I couldn't stop him, and I was full-blown running on this horse," Coby recalls. "I had never really ridden a horse before, but it was easy. After that, I pretty much just helped the team out every day exercising the horses."

Coby ended up on Teton Team in his early teens, primarily serving as the back catcher, the person in charge of holding whichever horse is not being used. He then stepped into the role of catcher on occasion before getting on a horse himself to compete in Chief races the summer before his junior year of high school. During Chief races, competitors complete just one lap on a single horse while wearing a traditional Native American headdress.

Coby's first opportunity at competing in a relay race came after he graduated from Blackfoot High School in 2021, but it was for his uncle's team.

"And I got my butt kicked, obviously, because it was really, really tough," he admits.

And it was also "really, really tough" on his immediately family, particularly his mother. Elise grew up with the Teton Team started by her parents in 1985, and she even competed in some female horse races in her youth. But she also saw the toll it took on her husband, Alonzo, who was a standout rider for nearly three decades.

"Alonzo was a winner; he was a champion," she says. "But as he got older, he started getting into accidents and getting hurt a lot more. And the kids were just terrified because they would see him get knocked out from a collision. He'd be laying there, blood coming out of his ear, and the kids would be freaking out.

"So, once he decided to hang it up, I got a break. I wasn't stressed and just went to races to support my mom and dad's team."

The Cobys' oldest son, Billyzane, raced a little bit before switching to other roles on Teton Team. But Elise still seems surprised that Azeri, who she remembers, "running around in his underwear when he was a little guy, straddling the arms of the couches like he was mounting a horse so often that we had buy him a whip so he could simulate that he was a relay rider," ended up as one of the better jockeys on the circuit.

"He just took off," she declares. "And now he's probably on his way to having his own team someday. … But right now he wants to carry my dad's legacy."

Azeri Coby has already started to develop his own brand, competing in Chief races under the name of Rock Star Made. But he is also extremely proud to carry on a family legacy that goes back more than a century. Alonzo Coby's grandfather, Keno Coby Jr., was a champion racer dating back to the 1920s, and seeing Keno compete as a child is one of the things that initially got Clarence Teton interested in Indian relay racing.

"The Coby team is probably the longest running team on the reservation, which is my family," Alonzo Coby says. "My nephews continue to do it, but there's also the Tetons. So, it's a very, very important tradition in our families that's been passed from generation to generation. It's going to be a sad day when we don't have a Coby team or a Teton team."

While it's believed the original concept of Indian relay racing goes back four or five centuries, races in their current form first developed in the early 1900s. While the exact date and location is disputed, Fort Hall lays claim as the birthplace of the sport. Regardless, there's no disputing the amount of pride members of the Shoshone-Bannock Tribe feel because of that designation.

"When these races happen, it's like every tribe is going against one another, and whoever wins is the best tribe," Azeri Coby says. "I don't know how other people look at it, but that's how we look at it. So, it's important for us to hold our ground when people come here, and the cultural significance is still here. It's beautiful."

Danger on the Track

A standout multi-sport athlete at Blackfoot High School in the '80s, Alonzo Coby aspired to play wide receiver at Utah State before being derailed by a knee injury during a spring football practice as a freshman. However, he elected to stay at USU while competing in something arguably even more dangerous: bull riding.

"I loved riding bulls," Alonzo proclaims. "I started riding bulls at 12 years old. That was my passion."

His other passion was his high school sweetheart, Elise, and both of them ended up graduating from Utah State University. Alonzo, who currently serves as director of planning and development for the Shoshone-Bannock Tribes, completed a degree in environmental design/architecture, while Elise earned bachelor's and master's degrees in environmental engineering. Now employed at the Idaho National Laboratory, she is pursuing a second master's in nuclear engineering through Idaho State University.

"The whole college experience there was such a blessing," Alonzo says. "I always tell my friends that the best times of my life were getting my education at Utah State University. … That's why we were really glad when Azeri chose Utah State University because he was kind of on the fence between going there and the University of Utah. I can still remember him tell us he was going to USU while we were standing in the kitchen.

"We were so happy. We knew he was going to get a great education there and having him graduate in December and becoming an alum of Utah State means a lot to us."

During his time in Logan, Azeri has managed to juggle his time working towards his degree in computer science while also competing in relay racing in the fall and doing a lot of snowmobiling in the winter. A self-proclaimed "adrenaline junkie," Alonzo Coby has been featured in several Alpine Assassins videos that feature sledders tackling deep powder and dropping off some high cliffs, and now he's usually joined in the backcountry by Billyzane and Azeri.

"It scares me every time they get on a snowmobile because they're so freaking talented, and the things that they do are unbelievable," Alonzo insists. "Azeri's been riding with us since he was 12, and people couldn't believe how old he was. That kid is a really, really talented sledder."

Like his father, Azeri also wanted to be a bull rider before getting into Indian relay racing. And in Alonzo's experience, that isn't necessarily the safer route to take.

"Indian relay," Alonzo quickly replies when asked which sport he got hurt the worst competing in. "I broke my shoulder into three pieces when I was racing and my horse went over the rail with me on it."

The Cobys witnessed more of that danger firsthand on June 14 at the Muckleshoot Gold Cup. That race includes a fourth horse and an extra exchange, and while Azeri was coming in for his final transition, Joe Jackson was heading back onto the track. The head of Jackson's horse knocked Azeri off his mount and briefly onto the ground, directly in front of Jackson's horse.

Still clinging to the reins, Azeri managed to get out of Jackson's path only to spin around to the side of his horse and end up on the ground. He somehow avoided being trampled, got back on his feet, ran to this final horse, and still finished the championship race in fifth place.



Coby acknowledges the victory by Canadian jockey "Jumping Joe" Jackson, left, in the championship race of the Shoshone-Bannock Indian Festival relay race in Fort Hall, Idaho. *Photo by Jeff Hunter.*

"I was standing right standing behind the team, and when he got hit like that, as a father the first thing that came to my mind is, 'I hope he's OK and I hope the horse is OK,'" Alonzo remembers. "Seeing your child get hurt is what you fear most, and I know because I've been through it. I was a jockey for almost 28 years, and I know that injuries happen when horses are going that speed.

"We were just so thankful it was just his knee getting tweaked."

Of course, that sprained MCL still managed to throw Azeri Coby's season into disarray shortly after it got started on Memorial Day weekend. Unable to train like he usually does — Coby says he's determined the ideal race weight for his 5-foot-9 frame is between 150-155 pounds — he was concerned about his ability to be explosive when he was cleared to return to action.

But his mother, who has witnessed her son push himself in the late winter and spring to be in optimal condition come relay season, wasn't surprised that he found out a way to get back on the track faster than anyone expected.

"I have never seen a kid so determined," Elise says. "Azeri has always been on top of his game as far as how to train his horses and how he trains himself. He's always very disciplined with his regimen. He always works really hard to be the best athlete he can out there because he knows he has to match the horses. If they're going to do their job, he has to do his job. They're a team."

It also helped that Azeri was able to compete in the Chief race, which doesn't require a horse exchange, at the Fort Bridger Treaty Day races held at Fort Hall on July 3. Literally living the old adage of "get back on the horse" after experiencing something traumatic, Coby and his veteran horse, Henry, pulled away down the stretch to win the race and some prize money.

"I was worried about him being safe, but I think that was important for him to enter the Chief race," Alonzo says. "He was missing it a lot. I think it boosted his morale and his confidence getting back out there and winning."

Back Up to Speed

After the opening-heat win at the Shoshone-Bannock Indian Festival on Friday, August 7, Azeri Coby's outing the next day didn't go as smoothly due to a team mishap on the first exchange. It put Teton Team on the cusp of not advancing to the championship race on Sunday afternoon.

Five other teams were also in the same situation, so a drawing was held Saturday to decide which of those half-dozen teams would still have a shot at the title.

"And we were the lucky ones that drew the chip to get into the championship," Coby notes.

"Fortunately, the creators saw that they wanted the defending champion to be in the championship heat today," Alonzo Coby echoes.

Teton Team's fortuitous draw set yet another showdown between Azeri Coby and Jackson with everything on the line, but as the championship race kicks off it's JonMarc Skunkcap who leads the entire first lap with Azeri in second place. Following a near-perfect transition during the first exchange on another blistering hot day in Fort Hall, Coby vaults into the lead until Jackson catches up to him on the backstretch. The two rivals are neck-and-neck coming into their exchange zones.

But while Jackson makes a clean change of horses, Coby ends up a little too far ahead of his final mount and is forced to take a quick step back before wrapping his hands around his horse's neck and swinging up. That leaves Jackson and his horse directly in front of Coby as he leaves Teton Team's zone, and he comes in so tight that Jackson briefly throws Coby a stiff arm with his right hand like a running back on the football field.

Jackson is nearly up to speed at that point, and he quickly pulls away by several lengths. Coby closes the gap to about one length down the stretch, but it isn't enough to catch Jackson, who raises his fist in triumph as he crosses the finish line while Coby bows his head slightly and acknowledges Jackson's victory by pointing his whip in his direction.

"I jumped off, and I just hesitated," Coby says of his critical second exchange.









TOP: Azeri Coby, third from left, with Teton Team and its founder, Clarence Teton, his grandfather. *Photo by Levi Sim.* ABOVE: Azeri Coby (left), Alonzo Coby (middle), and Keno Coby Jr. (right) have all been top-tier relay racers. *Photos by Jeff Hunter and courtesy of Alonzo Coby.*

"My legs just kind of crumbled underneath me, and I didn't have enough strength to make the next jump, so I just swung on.

"I think my knee injury played into that because I haven't really been able to train or run. So, I was just kind of testing where I was with this race, and I did a lot better than I thought. And if I'm being honest, my legs held up way better than I thought they would because I know I'm not at my full potential right now."

As he starts to remove the colorful tape on his left leg, Coby says he plans to take it easy on his knee as much as possible before returning to action in a couple of weeks at the next race on the schedule. But he's primarily focused on he and the Teton Team repeating at the Indian Relay National Championship Races held at the Eastern Idaho State Fair in September.

"Azeri put in a lot of hard work the past two months rehabbing his leg, and he really gave it his all in the championship," Alonzo Coby says of his son as he gets ready to leave the track. "It was unbelievable that he even made it to the championship. That's quite the accomplishment considering he was competing against 23 of the top relay teams in the country while he's probably only at about 80 or 90 percent.

"You know, if he had been able to race the past two months, it might have been a different story. But you know, that's Indian relay. Injuries are a part of it. But as a father, I'm really, really proud of that kid." **A**

Editor's Note: *Two weeks after their second-place finish at the Shoshone-Bannock Indian Festival, Azeri Coby and Teton Team won the Indian relay races at the Cassia County Fair in Burley, Idaho. But after winning all four of his heats at the National Indian Relay Championships at the Eastern Idaho State Fair in early September, Coby was unable to defend his title in the championship race on Sept. 12. A couple of small miscues during the second exchange led to Teton Team finishing second to Tristan Birdinground from Montana.*

Forest Bathing

FINDING HEALING AND CONNECTION IN THE WOODS

By Jennifer Payne · Photos by Levi Sim

A whistle cuts through the morning air. one by one, figures emerge from beneath cottonwood trees lining a shaded trail. For several minutes — absent phones, electronic devices, and even the conversation of others — they have wandered alone.Now, though, it is time to return.

A simple question is asked. "What did you notice?" The answers come … slowly.

One person describes the sounds of water from the nearby stream. Another admits they hadn't realized how tense they'd been feeling. A third simply points upward and says, "The clouds."

For Utah State University professor Jesse Jones, moments like these are the reason he teaches outdoor leadership. He is the director of the Outdoor Adventure Leadership program in the Department of Kinesiology and Health Science in the Emma Eccles Jones College of Education, Health, and Human Sciences, and has spent much of his life helping people experience the outdoors.

Jones began his career leading river and backpacking expeditions across Utah, Wyoming, and Idaho. While earning a master's degree from Ohio University and a Ph.D. in recreation, sport, and tourism from the University of Illinois at Urbana-Champaign his work expanded across the nation. Since joining the Utah State faculty in 2019, he has continued leading outdoor and educational experiences internationally, including programs in Japan and Croatia. Across these settings, Jones has guided people through alpine meadows, forested mountains, remote canyons, and whitewater rivers, where hours — or even days — pass without modern distractions.

In early 2024, after years of leading people through wild places and then teaching his students to do the same, he found himself wrestling with a question that technical outdoor skills couldn't answer: What is it about the mountains and forests that change people?

"For most of my career, I have worked in outdoor recreation, adventure education, and experiential learning. I believe deeply in the power of adventure," Jones explains. "At the same time, I have become increasingly aware that our relationship with the outdoors can become centered on achievement, performance, and consumption.

"We climb the mountain and take the picture, then move on to our next experience. It is possible to spend an entire day outside without ever really becoming present to where we are. I began looking for practices that could help people slow down and experience the natural world differently."

THE JAPANESE ART OF FOREST BATHING

The modern concept of forest bathing emerged in Japan in the early 1980s, during a period marked by rapid economic growth, urbanization, demanding work schedules, and increasing concern about chronic stress. Long working hours and deaths associated with overwork were drawing greater public attention. Against this backdrop, Japan's Forestry Agency introduced the term and practice of Shinrin-Yoku in 1982 as a preventive healthcare initiative, encouraging people to slow down and experience the forest's restorative power through their senses.

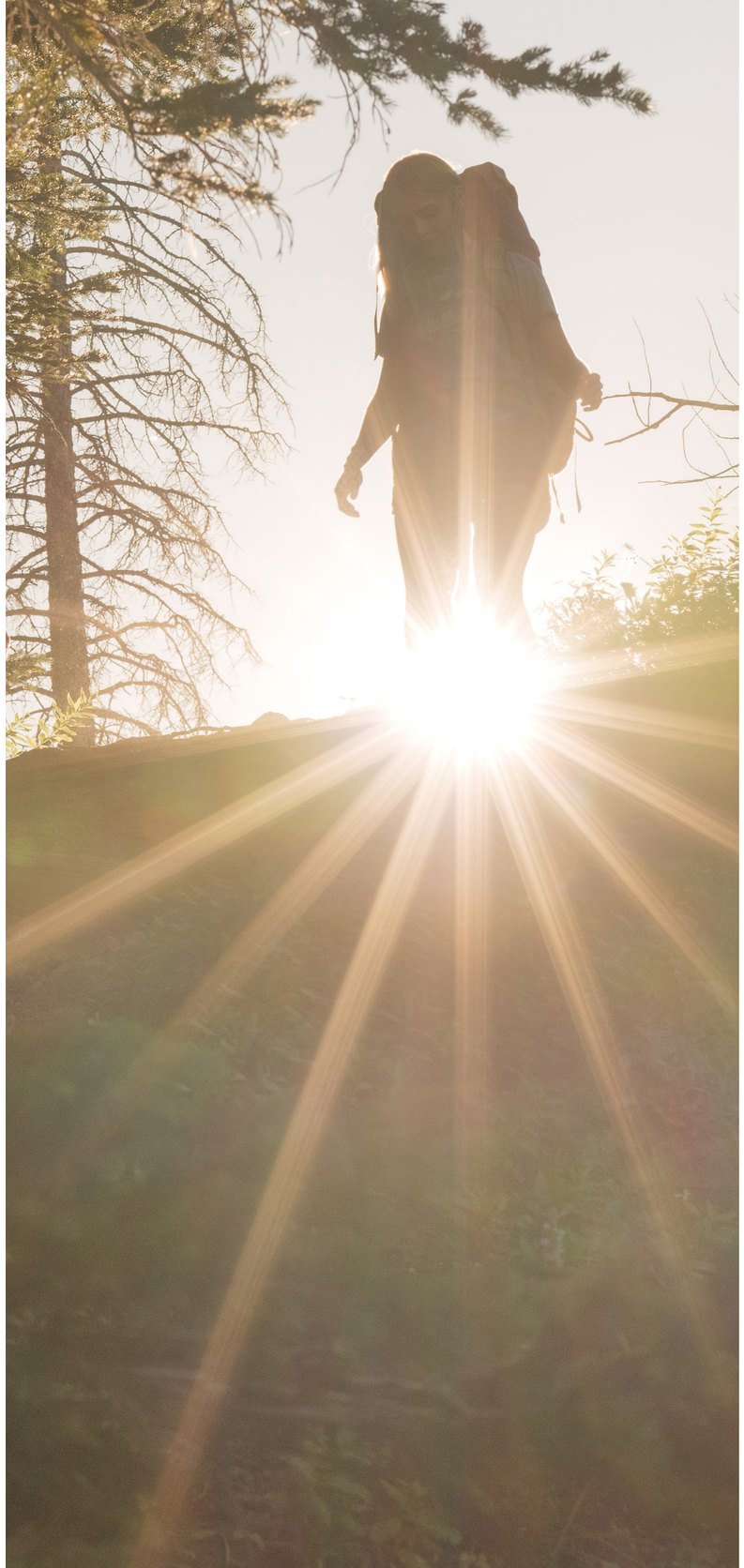
Over the following decades, researchers studied the physical and psychological effects, helping the practice evolve from a form of forest-based recreation into an evidence-informed approach to preventive health. Unlike hiking or other goal-oriented outdoor activities, forest bathing emphasizes being present without needing to reach a destination or accomplish a competitive goal.

For Jones, however, the value of forest bathing extends beyond stress reduction. The practice invites people to reconsider their relationship with the natural world. It is not simply a setting for recreation, but a living community in which humans are participants.

Determined to better understand and incorporate the practice into his own teaching, Jones completed a training program and certification through the Association of Nature and Forest Therapy Guides. The training included six months of online learning and collaboration followed by four days of intensive field experience in Japan. Once complete, Jones was certified to guide Shinrin-Yoku sessions for the public.

Although forest bathing can initially sound — as Jones jokingly describes it — "a little crunchy," the practice itself is simple.

"At its heart, it is about slowing down and paying attention," Jones explains.



Shinrin-Yoku, or the Japanese art of forest bathing was introduced in the 1980s as a healthcare initiative. Faculty member Jesse Jones, director of the Outdoor Adventure Leadership program in the Department of Kinesiology and Health Science at USU now incorporates the practice into his own teaching.

A forest bathing session typically lasts one to three hours and develops through three relationships: a person's relationship with themselves, with others, and with what practitioners call the "more than-human world." The guide offers simple sensory invitations that create opportunities for reflection, but participants decide for themselves what the experience means.

Throughout the experience, the guide works in partnership with the landscape, adapting each invitation to the people, place, and conditions. Yet nature remains at the center of the experience. As forest therapy practitioners often explain, "The forest is the therapist; the guide opens the doors."

A CLASSROOM WITHOUT WALLS

Since his training, Jones has incorporated the principles of Shinrin-Yoku into the Outdoor Adventure Leadership curriculum at Utah State.

"My goal is not to simply teach students how to lead a forest therapy session. I want them to become more thoughtful and intentional designers of human experiences," he insists. "I want them to understand that leadership doesn't always mean standing at the front and directing everything. Sometimes leadership means creating the conditions for people to slow down, notice, listen, and make their own meaning."

Among the students who have experienced forest bathing firsthand is

Professor Jesse Jones (left image, standing) is certified to guide Shinrin-Yoku sessions for the public. Unlike hiking or other goal-oriented outdoor activities, forest bathing emphasizes being present without needing to reach a destination or accomplish a competitive goal.









Jayden Beach, who graduated from Utah State in Spring 2026 with a bachelor's degree in recreation administration and a minor in outdoor adventure leadership. Today, she is a recreation coordinator for Nibley City, where she oversees youth sports programs and community events.

"When I participated in Shinrin-Yoku with Jesse, it felt like an escape," Beach recalls. "In the midst of school and clubs, working two jobs, and maintaining relationships and other responsibilities, my life could get very overwhelming. In Jesse's classes, we took time to disconnect from everything else going on and focus on being present. Every time I left his class, I wished I could stay longer."

She says one class in particular — Outdoor Recreation Management — was one of the most impactful courses she took. After discussing book chapters in class, the students would visit places around campus listening, feeling, breathing, and connecting with the world around them.

"I think a lot of people shy away from forest bathing when they first hear about it because it seems strange," Beach smiles. "I'd love to incorporate it into a hiking or outdoor adventure program to help people experience it alongside activities they are already familiar with. Ultimately, I think that is what all recreation is about — getting us disconnected from the stress and chaos of daily life and reconnected to ourselves and the outdoors in a positive way."

THE OUTDOOR 'PRESCRIPTION'

For people who want to experience the benefits of forest bathing outside of a formal Shinrin-Yoku session, Jones's advice is surprisingly practical and easy.

"Every six months we need about four days in the outdoors away from society, away from technology, where we can begin to rest and recuperate. Then we need about an hour a week," he says.

"It's about being fully immersed. When I'm with my own family on the Salmon River in Idaho, we're traveling almost 100 miles over four or five days, and we can't be on our phones. Time is suddenly on our side. I've watched my kids lying on the side of the raft just staring up at the sky. It seems like they're bored, but they're actually looking at the clouds, finally seeing them. All of this is part of the forest bathing experience where we can reconnect to the natural world and reenergize."

For families, Jones's advice is refreshingly uncomplicated. He recommends just getting into the woods and leaving all the technology behind. He says there's a detox period, but it passes and the experience becomes freeing and healing for the entire family.

"The outdoors fundamentally changes people," he exclaims. "Humans flourish when they are connected with the land. I hope people leave feeling more connected than when they arrived. That's my goal." A

"I WANT THEM TO BECOME MORE THOUGHTFUL AND INTENTIONAL DESIGNERS OF HUMAN EXPERIENCES."

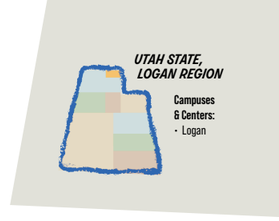
— JESSE JONES



THE Great Outdoors

USU STUDENTS ACROSS THE STATE SHARE SOME OF THEIR FAVORITE REGIONAL SPOTS TO EXPLORE

By Timothy R. Olsen '09, '18 MBA · Illustrations by Liz Lord '04



Tony Grove Lake

LOCATION: Wasatch-Cache National Forest • ***LATITUDE:*** 41.893892 • ***LONGITUDE:*** -111.639697 • ***ACTIVITIES:*** Swimming, Non-Motorized Watercraft, Hiking, Trail Running, Mountain Biking, Fishing, Camping • ***COST:*** $10/vehicle (day use), $30 weekly pass, $60 season pass

LOCATED UP LOGAN CANYON, just 27 miles from Utah State University's Logan Campus, Tony Grove Lake and its surrounding area is one of the favorite local spots for students to beat the heat. Non-motorized watercraft such as paddleboards, kayaks, and canoes are allowed on the lake, which is roughly 730 yards long and 260 yards wide with a maximum depth of 36 feet. There is a walking trail that surrounds the lake, as well as a picnic area near the water and a fully accessible boardwalk. The lake also serves as the starting point for the White Pine Lake Trailhead, which kicks off a 6.4-mile roundtrip hike to Naomi Peak, the highest mountain in the Bear River Range.



Wind Cave Trail

LOCATION: Logan Canyon (near Guinavah-Malibu Campground) • ***LATITUDE:*** 41.759486 ***LONGITUDE:*** -111.709508 • ***DISTANCE:*** 3.7-mile out-and-back, 1,000-feet elevation gain ***DIFFICULTY:*** Moderate • ***TIME REQUIRED:*** 2-2.5 hours • ***COST:*** Free

THIS POPULAR HIKE, located less than a 10-minute drive from campus is basically a rite of passage for students attending USU's Logan campus. Rising quickly up the hillside from the canyon floor, this switchback-laden journey provides gorgeous views of Logan Canyon and rewards those who make it to the top an opportunity to explore a delicate triple arch and cavern carved out of the limestone rock over millennia. Known locally as the "Witch's Castle," the caves are part of local lore as the home of the canyon's resident witch — Hecate. Stories of her appearing date back to the early 1900s, sometimes with her son and sometimes with her dogs that can be heard howling at night when the canyon winds funnel through the caves.



Mantua Reservoir & Eagle Rise Mountain Biking Trails

LOCATION: Mantua, Utah / Sardine Canyon • ***LATITUDE:*** 41.4959 • ***LONGITUDE:*** -111.9524
ACTIVITIES: Kayaking, Fishing, Paddleboarding, Boating, Camping, Mountain Biking, Hiking • ***COST:*** Free

LOCATED JUST MINUTES from USU's Brigham City campus, Mantua Reservoir is a quick escape and local favorite for Brigham City Aggies and residents alike. Water activities have taken a hit in recent years as rising temperatures have led to harmful algal blooms during the summer months, but nearby campsites and hiking trails still make this a popular destination to beat the summer heat. Along with beautiful lake views, the east side of the reservoir has turned into a veritable mountain bikers' paradise thanks to the Eagle Rise trail system. These trails are mostly moderate as they climb through the hills, while the 4.2-mile Dike Trail encircles the lake and provides an easy alternative.



Adam's Canyon Trail

LOCATION: Located just off North Eastside Dr. and Highway 89 in Layton, Utah • ***LATITUDE:*** 41.0664 • ***LONGITUDE:*** -111.9094
DISTANCE: 3.6-mile out-and-back, 1,423-feet elevation gain • ***DIFFICULTY:*** Moderate/Hard • ***TIME REQUIRED:*** 3-4 hours • ***COST:*** Free

ASIDE FROM THE USU EXTENSION KAYSVILLE PONDS and nature trails next to the Kaysville campus, the Adam's Canyon trail is considered the area's signature hike and most famous outdoor destination. Along with fantastic views of the Great Salt Lake and Davis County, the payoff at the end is a 40-foot waterfall. For those in search of extra adventure, the trail ventures past the falls, though it is largely unkempt and difficult to follow, to the Adam's Canyon Cabin. This is a roughly 5.5-mile round trip with an intense vertical climb for advanced hikers only. The cabin itself is available for public use and is popular during hunting season.



UTAH STATE, WASATCH REGION

Campuses & Centers:
- Salt Lake
- Orem
- Park City
- Heber

Tibble Fork Reservoir & Trailhead

LOCATION: American Fork Canyon • ***LATIATUDE:*** 40.48276928 • ***LONGITUDE:*** -111.6459663
ACTIVITIES: Swimming, Non-Motorized Watercraft, Hiking, Trail Running, Mountain Biking, Fishing
COST: $10/vehicle (3 days), $60/season

LOCATED JUST 10 MILES UP AMERICAN FORK CANYON, Tibble Fork Reservoir and the surrounding area are student favorites for activities like paddleboarding, swimming, hiking, mountain biking, and exploring with off-road vehicles. Parking can be limited, but the reservoir, which sits nestled in a pine forest, offers stunning mountain views. Along with the bevy of non-motorized lake activities, the Tibble Fork Loop, Tibble Fork Trail, and Silver Flat Lake Trail are all nearby options to explore the outdoors.



Wasatch Crest Trail

START: Guardsman Pass trailhead in Big Cottonwood Canyon or Big Water trailhead in Millcreek Canyon ***DISTANCE:*** 12.5 miles point-to-point • ***DIFFICULTY:*** Hard/Advanced ***TIME REQUIRED:*** 5-7 hours (hiking) • ***ACTIVITIES:*** Hiking, Trail Running, Mountain Biking (even-numbered days on parts) • ***COST:*** $5 per vehicle (fee to enter Millcreek Canyon)

THIS ICONIC TRAIL runs across the top of the Wasatch mountains, providing views of the mountains that make up Solitude ski resort and Park City. It's extremely popular among mountain bikers, hikers, and trail runners, as well as a favorite of Utah State University Wasatch Region students. "Popular" features are Puke Hill — which is exactly what it sounds like — and the Spine, an extremely technical double black diamond rock fin that overlooks Lake Desolation. Whether on two wheels or two feet, those who brave the trail are greeted with incredible views, including a gorgeous meadow with wildflowers blooming in July and August.

Thanksgiving Point

THANKSGIVING POINT IS A PROPERTY IN LEHI near the point of the mountain. It is perfect for families or date night, with 5 different attractions: The Museum of Ancient Life, Ashton Gardens, The Butterfly Biosphere, The Museum of Natural Curiosity, and Curiosity Farms. During the fall, they also host the largest location of Cornbellys and during Christmas time you can see a magnificent walk-through light show at Ashton Gardens called Luminaria.

Bridal Veil Falls & Provo River Trail

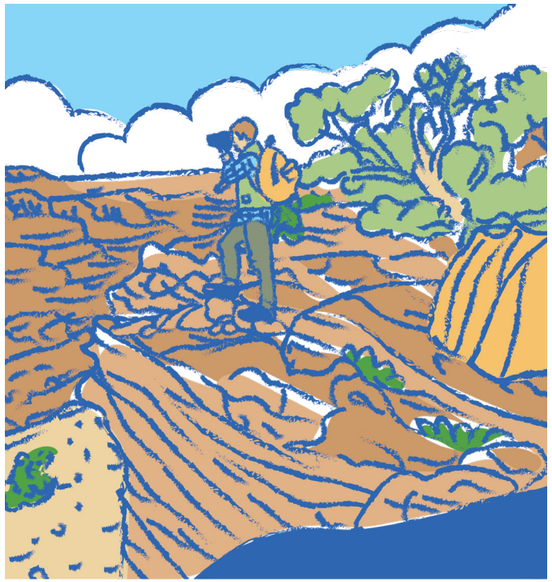
LOCATION: Provo Canyon • ***LATITUDE:*** 40.339145 • ***LONGITUDE:*** -111.602081
DISTANCE: 1.3 miles • ***DIFFICULTY:*** Easy • ***TIME REQUIRED:*** 30-60 minutes
ACTIVITIES: Hiking, Photography • ***COST:*** Free

THE TRAIL IS ONE OF THE MOST POPULAR and easy to access in the Utah canyons. It runs right beside the Provo River starting at Vivian Park (which is also a great spot for fishing, barbecuing, hammocking, etc.) and ends at Utah Lake. The trail passes Bridal Veil Falls which is a gorgeous waterfall that can be seen from the main canyon highway. The trail is paved, and great for all ages. There is a good amount of water that puddles down at the bottom of the falls and can be played in, with more difficult trails that lead higher up towards the top of the waterfall.



The Wedge

LOCATION: San Rafael Swell • ***LATITUDE:*** 39.09594722 • ***LONGITUDE:*** -110.7494222
ACTIVITIES: Camping, Photography, Hiking, Mountain Biking • ***COST:*** Free for day use; nearby BLM campsites $15



UTAH STATE, USU EASTERN REGION

Campuses & Centers:
- Price
- Castle Dale

ROUGHLY AN HOUR DRIVE from Utah State University Eastern's campus sits the Wedge, also known as the "Little Grand Canyon." This Emery County gem offers breathtaking views of scenic vistas and the San Rafael River 1,200 feet below. Make sure to come prepared, though, as there are no services in the area. That desolation is a big reason why outlaws like Utah's own Robert LeRoy Parker, a.k.a. Butch Cassidy, escaped to the area and why USU Eastern students visit it now. Other nearby attractions include the Buckhorn Wash Pictograph Panel and various trailheads.

Gordon Creek Falls

START: Gordon Creek Trailhead • ***LATITUDE:*** 39.62151944 • ***LONGITUDE:*** -110.9535639
DISTANCE: 2.2 mile out-and-back (to lower falls) • ***DIFFICULTY:*** Easy
TIME REQUIRED: Varies, 1–3 hours • ***ACTIVITIES:*** Camping, Photography, Hiking, Mountain Biking • ***COST:*** Free for day use

LESS THAN 30 MINUTES FROM CAMPUS, Gordon Creek Falls is another popular destination for USU Eastern students. From the Gordon Creek Trailhead off Trestle Road, the lower falls is a 2.2 easy roundtrip hike. Or, a half-mile walk in the opposite direction will take adventurers to the Gordon Creek Trestle Bridge. For those in search of a longer journey, the upper falls is approximately 1.5 miles past the lower falls, and a historical cabin is a little more than a half mile beyond those. Altogether, the round-trip jaunt to the cabin and back is roughly 6.4 miles.



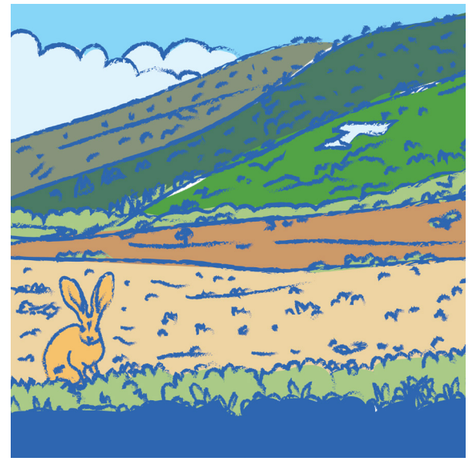
UTAH STATE, TOOELE REGION

Campuses & Centers:
- Tooele
- Wendover

The "Tooele T"

START: Convergence of Middle Canyon Road & T Buffalo Complex Road • ***LATITUDE:*** 40.52232
LONGITUDE: -112.26115 • ***DISTANCE:*** 1.8 miles out-and-back • ***DIFFICULTY:*** Moderate
TIME REQUIRED: 1–1.5 hours • ***ACTIVITIES:*** Hiking, Trail Running, Photography • ***COST:*** Free

A LOCAL TRADITION FOR USU TOOELE STUDENTS and community members alike, the hike to the whitewashed "T" on the mountainside overlooking town is a quick and rewarding workout. The trail makes a steady climb over loose rock and gravel up the foothill through native sagebrush and juniper, offering constant overhead views of the valley floor. Reaching the "T" awards hikers with wide-angle views across Tooele Valley toward the Stansbury Mountains and the Great Salt Lake. It is a popular spot for capturing sunset photos high above campus. There's not much shade, though, so remember to pack water and wear a hat.

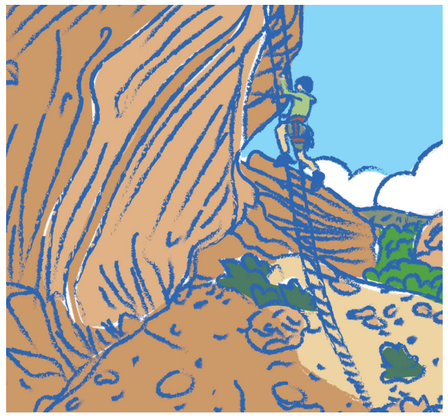


Butterfield Peaks Trail

LOCATION: Oquirrh Mountain Range, Middle Fork Canyon
LATITUDE: 40.4845 • ***LONGITUDE:*** -112.1777 • ***DISTANCE:*** 3.8-mile out-and-back, 1,456-feet elevation gain • ***DIFFICULTY:*** Moderate
TIME REQUIRED: 2.5–3 hours • ***ACTIVITIES:*** Hiking • ***COST:*** Free

STRETCHING ALONG THE CREST of the Oquirrh Mountains which split the Tooele and Salt Lake valleys, the Butterfield Peaks Trail provides sweeping views of to both the east and west. A favorite escape for USU Tooele students, the route climbs through mixed pine, oak, and aspen groves along the high mountain ridge. From the summit ridge, hikers can look down into the Bingham Canyon Mine basin or take in panoramic perspectives of the surrounding Great Salt Lake basin. The trailhead sits at the convergence of Middle Canyon and Butterfield Canyon Road, but is currently only accessible via Middle Canyon Road due to a severe washout.

Ashley Gorge Via Ferrata



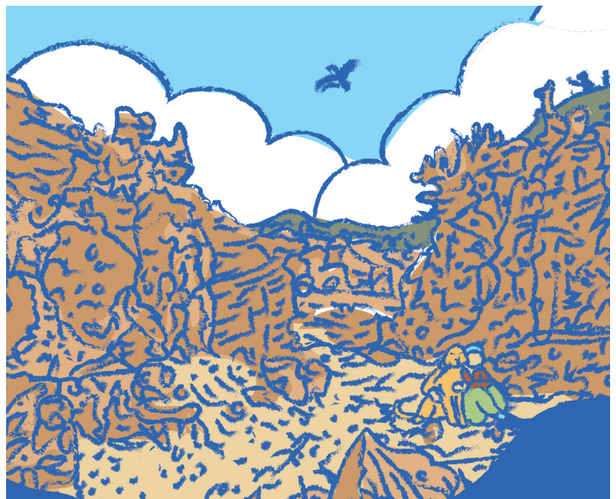
LOCATION: N. Ashley Spring Rd., Vernal, Utah
LATITUDE: 40.568879
LONGITUDE: -109.5615161
DIFFICULTY: Intermediate to Advanced
TIME REQUIRED: Varies by section
ACTIVITIES: Via Ferrata Climbing, Canyoneering, Hiking
COST: Free for experienced self-guided climbers with gear (required); guided options available

FOR AGGIES LOOKING FOR A LITTLE MORE THRILLING ADVENTURE, the Ashley Gorge Via Ferrata is a relatively new experience that delivers unprecedented cliffside climbing high above Ashley Creek. Climbers clip into steel cables and navigate iron rungs, suspended footbridges, and vertical rock faces along the canyon walls. Offering options for both beginner guided climbs and sustained multi-section routes for advanced athletes, it is one of the newest and most exciting world-class outdoor recreation assets in the region. Proper gear is required, and Uintah County also requires a waiver be signed prior to climbing.

Fantasy Canyon

LOCATION: Uintah Basin • ***LATITUDE:*** 40.0578 • ***LONGITUDE:*** -109.3943
DISTANCE: 0.6-mile loop • ***DIFFICULTY:*** Easy • ***TIME REQUIRED:*** 30-60 minutes
ACTIVITIES: Hiking, Photography, Geotourism, Sightseeing • ***COST:*** Free

FANTASY CANYON features some of the most intricate and delicate sandstone rock formations in the world. With names like Alien Head, Flying Witch, and Dinosaur Backbone, it's easy to see why the fragile mineral pillars, arches, and grotesque shapes transport visitors to another world. Essentially equidistant (45 miles/1 hour drive) from USU's two Uintah Basin campuses, the short trail — complete with interpretive markers — allows students to explore these alien-like hoodoos up close. Sunset and sunrise are especially magical times to capture photos as low light plays off the intricate stone sculptures.



Roosevelt Nature Park

LOCATION: 500 N. State St., Roosevelt • ***LATITUDE:*** 40.306385 • ***LONGITUDE:*** -109.993993
ACTIVITIES: Walking, Jogging, Fishing, Wildlife Watching, Photography • ***COST:*** Free

LOCATED IN THE HEART OF ROOSEVELT along Cottonwood Creek, the Roosevelt Nature Park is an outdoor sanctuary and community hub. Features include a paved walking trail network, pedestrian bridges, cottonwood groves, and a dedicated community fishing pond and amphitheater. Just a mere 1.2 miles from USU Uintah Basin Roosevelt campus, it's a great outdoor option for students looking for a peaceful study break or a casual afternoon walk. The park is also designed as an ecological refuge for native wildlife and monarch butterfly pollinators.

WITH NAMES LIKE ALIEN HEAD, FLYING WITCH, AND DINOSAUR BACKBONE, IT'S EASY TO SEE WHY THE FRAGILE MINERAL PILLARS, ARCHES, AND GROTESQUE SHAPES transport visitors to another world.

UTAH STATE, UINTAH BASIN REGION



Campuses & Centers:
- Vernal
- Roosevelt

UTAH STATE, SOUTHWEST REGION



Campuses & Centers:
- Beaver
- Bicknell
- Cedar City
- Delta
- Ephraim
- Junction
- Kanab
- Nephi
- Panguitch
- Richfield
- St. George

Maple Canyon

START: Maple Canyon (near Freedom, UT) • ***LATITUDE:*** 39.5568
LONGITUDE: -111.6872 • ***DISTANCE:*** 1.0–3.0 miles (varies by trail)
DIFFICULTY: Moderate • ***TIME REQUIRED:*** 1.5–3 hours
ACTIVITIES: Rock Climbing, Hiking, Camping, Photography
COST: $5 day-use fee; $15/night camping



SITUATED IN THE SANPETE VALLEY in the Manti-La Sal National forest within easy reach of students at the Ephraim and Nephi centers, Maple Canyon is internationally renowned for its unique conglomerate rock walls. Composed of cobblestones embedded in a natural limestone matrix, the canyon offers thousands of pocketed climbing routes and towering arch formations. Even for non-climbers, the canyon's shaded loop trails guide hikers past dramatic rock overhangs, narrow slot canyons, and dense maple-oak groves. USU Southwest students frequently head to Maple Canyon for day hikes, bouldering, and overnight camping.

Fish Lake

LOCATION: Fishlake National Forest • ***LATITUDE:*** 38.54766 • ***LONGITUDE:*** -111.71232
DISTANCE: 5.8 miles (Lakeshore Trail section / Pando Grove area) • ***DIFFICULTY:*** Easy to Moderate
TIME REQUIRED: 2–4 hours • ***ACTIVITIES:*** Boating, Fishing, Hiking, Camping, Autumn Leaf Viewing
COST: Free for day use (campground fees vary)

NESTLED EAST OF RICHFIELD AND BICKNELL, Fish Lake, the largest natural mountain lake in Utah, sits at nearly 9,000 feet in elevation within the Fishlake National Forest. This high-alpine lake offers crisp mountain air, pristine water, trophy lake trout fishing, and miles of scenic shoreline singletrack. The surrounding forest is also home to "Pando" (the Trembling Giant), a massive single-root aspen clone recognized as one of the largest living organisms on Earth. USU Southwest students head to Fish Lake for summer kayak trips, lakeside camping, and vibrant autumn foliage drives when the immense aspen canopy turns bright gold.

Snow Canyon

LOCATION: Snow Canyon State Park • ***LATITUDE:*** 37.2023 • ***LONGITUDE:*** -113.6401 • ***DISTANCE:*** 1.0–4.4 miles (varies by trail)
DIFFICULTY: Easy to Moderate • ***TIME REQUIRED:*** 1.5–3 hours • ***ACTIVITIES:*** Slickrock Scrambling, Caving, Rock Climbing, Photography • ***CLOSES:*** 10:00 PM
COST: $10 per vehicle (Utah residents) / $15 per vehicle (non-residents)

LOCATED JUST MINUTES from the St. George campus center, Snow Canyon State Park showcases a striking landscape carved from red and white Navajo sandstone overlaid with capped black basalt lava flows. Popular routes like the Scout Cave Trail and Lava Flow Trail take hikers past ancient lava tubes, red rock canyons, and expansive slickrock basins. A mainstay for USU Southwest students year-round, Snow Canyon offers sport climbing, road biking along the paved park drive, and photography during golden hour. Its close proximity to town makes it perfect for a quick trail run between classes or a full afternoon of slickrock exploration.

Coral Pink Sand Dunes

LOCATION: Southwest of Kanab • ***LATITUDE:*** 37.0399 • ***LONGITUDE:*** -112.7308 • ***DISTANCE:*** Open dune exploring / 0.8-mile Nature Trail • ***DIFFICULTY:*** Easy to Strenuous (sand hiking) • ***TIME REQUIRED:*** 1–3 hours
ACTIVITIES: Sandboarding, Dune Hiking, Photography, OHV / ATV Riding, Star Gazing • ***COST:*** $10 per vehicle

CORAL PINK SAND DUNES STATE PARK features over 1,200 acres of wind-deposited, coral-colored sand dunes framed by red sandstone cliffs and juniper forests. Created by the natural erosion of Navajo Sandstone over thousands of years, the shifting landscape offers a playground for desert outdoor enthusiasts. Students across the region visit the park to rent sandboards and sleds, hike to the crest of the highest dunes for sunset vistas, or ride off-highway vehicles across designated open dune sections. At night, the park's dark sky environment makes it an exceptional venue for stargazing.





Dellenbaugh Tunnel

UTAH STATE, MOAB REGION

Campuses & Centers:
- Moab

START: Dellenbaugh Tunnel Trailhead (Dubinky Well/Spring Canyon area) • ***LATITUDE:*** 38.681923
LONGITUDE: -109.919942 • ***DISTANCE:*** 3.9 miles out-and-back • ***DIFFICULTY:*** Moderate • ***COST:*** Free
TIME REQUIRED: 1.5-2 hours • ***ACTIVITIES:*** Hiking, Slickrock Exploration, Tunnel Exploration, Photography

TUCKED AWAY ON BLM LANDS NORTHWEST OF MOAB, Dellenbaugh Tunnel is one of the region's best-kept secrets. The trail traverses classic desert terrain—featuring open slickrock expanses, sandstone ledges, and wash crossings marked by painted blazes—as it winds toward the upper end of Spring Canyon. The headline feature waiting at the end of the route is a 150-foot-long natural sandstone tunnel carved into the rock. USU Moab students in the know can scramble into the wash and walk entirely through the cool subterranean passage, emerging onto a scenic canyon overlook that feels miles away from the typical national park crowds.

Hidden Valley Trail

START: Hidden Valley Trailhead (off Angel Rock Road/Rim Rock Lane) • ***LATITUDE:*** 38.5316 • ***LONGITUDE:*** -109.5283 • ***DISTANCE:*** 4.9 miles out-and-back
DIFFICULTY: Moderate to Strenuous ***TIME REQUIRED:*** 2-3 hours • ***ACTIVITIES:*** Hiking, Trail Running, Petroglyph Viewing, Dog Walking • ***COST:*** Free day-use fee

LOCATED VIRTUALLY IN THE BACKYARD of the USU Moab campus, the Hidden Valley Trail is a convenient and rewarding escape for local students. The hike starts with a stiff, switchbacking climb up the rocky face of the Moab Rim, gaining elevation quickly before leveling out onto a high, sheltered shelf. Once on top, the route opens into an expansive slickrock and grassy valley cradled between towering red sandstone cliffs. Hikers are treated to sweeping views of the Moab Valley floor and the distant La Sal Mountains. Dog-friendly and accessible year-round, it's a premier spot for a quick post-class cardio workout or an afternoon exploring with four-legged companions.

UTAH STATE, BLANDING REGION

Campuses & Centers:
- Blanding
- Monument Valley
- Montezuma Creek
- Monticello

Recapture Reservoir

LOCATION: 4 miles north of Blanding off Highway 191 • ***LATITUDE:*** 37.6681 • ***LONGITUDE:*** -109.4406
ACTIVITIES: Kayaking, Stand-Up Paddleboarding, Swimming, Fishing, Camping, Off-Roading • ***COST:*** Free for day use

JUST MINUTES NORTH OF THE USU BLANDING CAMPUS on the southern slopes of the Abajo Mountains, Recapture Reservoir — the largest reservoir in San Juan County — serves as an aquatic oasis in the high desert. Surrounded by pinyon-juniper hills, the reservoir is the go-to warm-weather destination for Blanding students looking to cool off, paddleboard, kayak, or fish for Northern Pike and largemouth bass. Beyond water sports, the surrounding shoreline features miles of off-road vehicle trails, primitive camping access, and relaxed spots for evening campfires.

House on Fire (Mule Canyon)



START: House on Fire & Mule Canyon Trailhead (off UT-95) • ***LATITUDE:*** 37.5437
LONGITUDE: -109.7445 • ***DISTANCE:*** 1.9 miles out-and-back • ***DIFFICULTY:*** Easy
TIME REQUIRED: 1-1.5 hours • ***ACTIVITIES:*** Hiking, Photography, Archaeological Viewing, Geotourism • ***COST:*** $5 per vehicle (BLM Day Use Permit)

LOCATED ABOUT 30 MINUTES WEST of the USU Blanding campus in the Cedar Mesa area, House on Fire in Mule Canyon is one of San Juan County's most famous Ancestral Puebloan cliff ruin sites. The short, gentle hike along the sandy canyon floor winds past cottonwood trees and red sandstone cliffs before arriving at the lower ruin alcove. The site gets its distinct name from an optical illusion created by late-morning sunlight reflecting off the ceiling of the alcove, making the stone above the masonry walls appear as though it is ablaze. It is a favorite weekend excursion for students across the Blanding region interested in archaeology, desert ecology, and photography.

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Working Wild

Utah is Rooted in its Open Range

By Lael Gilbert '01 · Photos by Levi Sim

Scarlet. Globemallow. Winterfat. Deathcamas. Coyote melon. Showy goldeneye.

These aren't names of hard-rock bands, though maybe they should be. They are, however, a few of the thousands of native plants found growing on the vast, underappreciated space tucked between Utah's ski slopes and red rock canyons — rangelands.

These are places where you can see from horizon to horizon, where sun warms miniscule, gray-green leaves of sagebrush, raising the subtle scent of pine and mesquite. Where sounds of wildlife come from far off — the scritchy call of a scrub-jay, the insistent hum of cicada, the clumsy flutter of sage-grouse hidden under the cover of low brush.

Rangelands make up more than 80% of Utah and provide habitat for an extraordinary array of wildlife. Nationally, about 84% of mammal species are associated with rangeland ecosystems during at least part of the year. Yet many people still have just a vague notion of what, and where they are.

They tend to be fairly dry, right? With deer and antelope … playing?

Perhaps the gap in knowledge can be excused, says Eric Thacker, rangeland Extension specialist from the Quinney College of Agriculture and Natural Resources. Even for scientists like him, it's often easier to describe what these diverse desert landscapes are not, rather than what they are. They don't include dense forests, plowed, irrigated farmlands, or completely barren places like sand dunes. Everything else, most of Utah and half of the land in the West (and the world), falls into the category of rangeland.

Often underappreciated, those areas are the working backbone of the U.S. and should be celebrated — especially since this is the International Year of Rangelands and Pastoralists (livestock farmers) — even if they don't get Instagrammed as much as Utah's national parks.

But those who live and work in the rural West don't need convincing. They already know what these landscapes do: feed livestock, sustain rural economies, shelter wildlife, and provide clean water and energy while quietly keeping natural systems functioning.

"Rangelands are working lands. Not just for livestock, but for how our world operates," Thacker explains. "And our understanding of them has changed almost as much as they have over the years."

The early West gave these lands a complex history. For thousands of years, Native peoples depended on rangelands for food, travel, and culture, shaping it through long use. Later, Euro-American settlement brought a different approach. Settlers sought parcels with access to water — desirable tracts were adjacent to springs, rivers and streams. The rest wasn't the kind of land you'd pay $1.25 an acre for. No one claimed it, but everyone grazed it.

Prior to the 1930s, ranchers had little incentive to limit the size or spread of herds. Overgrazing reduced native plants and led to widespread soil erosion. Historical accounts from the early 1900s often describe Utah, along with much of the West, as "depleted."

"Places like Utah and Texas were on the brink of disaster," Thacker says. "Grasses were grazed faster than they could recover, and in many places the deep-rooted native plants that held soil in place were becoming sparse. Topsoil washed away, and some areas lost their ability to grow plants."

Open range gradually gave way to fenced land and barbed wire, while federal legislation eventually brought grazing on public lands under a system of permits and management intended to protect the land from overuse. Since then, range conditions have generally improved. Land managers now aim to match the number of grazing animals to what the land can support. Agencies like the BLM and Forest Service monitor the land to prevent it from being overused. Researchers at USU and other institutions have developed better ways to understand how grasses, soils, and water respond to grazing, leading to practices such as rotational grazing and active restoration.

Today's management perspective holds both the practical, the future, and the worst-case scenario of the past in perspective, explains Brant Hallows, a USU range program alum and a longtime land manager in the Richfield, Utah field office of the Bureau of Land Management (BLM).

"These places aren't static, and still face challenges," Hallows says. "They've changed incredibly, even in recent history, and continue to. Some people say we should just let mother nature do the work, but there are plenty of natural things we do



Eric Thacker (left), a rangeland Extension specialist, says our understanding of rangeland has changed over the years. Those changes can be attributed to the work of researcher like Kari Veblen (right) who focus on why restoration succeeds in some places and not in others.

MOST OF UTAH AND HALF OF THE LAND IN THE WEST (AND THE WORLD), FALLS INTO THE CATEGORY OF RANGELAND. OFTEN UNDERAPPRECIATED, THOSE AREAS ARE THE WORKING BACKBONE OF THE U.S. AND SHOULD BE CELEBRATED — EVEN IF THEY DON'T GET INSTAGRAMMED AS MUCH AS UTAH'S NATIONAL PARKS.

not want happening here, these forces have to be managed."

Land managers and researchers began to recognize dry landscapes didn't respond to changes in simple, predictable ways. The ecology of rangelands is complex, slow and unique. Though early management efforts were mostly livestock-centric, they've expanded over time to be more holistic, recognizing the complexity of each of these ecosystems.

"We've learned a lot about how grazing interacts with plant communities, soil processes, water cycles, and animal behavior," Thacker says. "Desert ecosystems operate at slow rates, and change has to be monitored carefully over time. We're looking for long-term stability within the context these ecosystems operate — decades, and longer."

That knowledge becomes especially important when a landscape has been disturbed. Roads, mines, pipelines, wildfire, and invasive weeds can all leave behind bare ground where native plants may be slow to return. Restoring these places isn't as simple as scattering seeds and waiting for rain.

That's where researchers like Kari Veblen come in. Her work at Utah State focuses on understanding why restoration succeeds in some places and fails in others, studying how native grasses and shrubs establish, how invasive species compete, and how managers can tip the odds in favor of healthy plant communities through plant restoration and grazing management. These answers help land managers decide when to seed, what to plant, and where limited restoration dollars will have the greatest impact.

Rangeland research helps provide the foundation for land management across the West. Clint Wirick took his USU rangeland education to the U.S. Fish and Wildlife Service, where he works with ranchers who want to improve the public and private lands they use for grazing. He helps build healthier landscapes for threatened and endangered species, and other species at risk, and ends up benefiting multiple species of animals, plants, fish and insects — as well as humans — in the process.

Grazing is now understood to be a force like wildfire and drought — a factor for change on a much-changed landscape — that can either be part of a healthy ecosystem or push it over the edge.

The Bureau of Land Management is the federal agency with oversight for much of the rangeland in the West, including almost 23 million acres in Utah. The rest is managed by the Forest Service, the state, tribes, and private landowners. Hallows, Wirick, and hundreds of professionals like them manage these competing uses and ecological pressures with weed management, grazing permits, active restoration and prescribed fire.

Although federal agencies oversee public rangelands in Utah, the managers themselves are often professionals with a Utah education, including from USU's natural resource programs like Hallows and Wirick. They draw on science done at Utah State to improve the land. With a complex history and tangled ecology, it takes expertise to understand how to best do this. Rather than relying on intuition alone, today's managers can draw on decades of research to make decisions to balance competing interests.

Rangelands do a lot of invisible work too, says Wirick. They store huge amounts of carbon underground, filter water, replenish aquifers, regulate streamflow, and promote pollinator diversity for healthier plants beyond their borders. He has learned the importance of supporting the people who live on and responsibly care for these natural spaces to keep these processes strong.

"Ranchers do everyone a service," Wirick says. "My goal is to keep them profitable and on the land, as well as their kids and grandkids, and the only way to do that is to run a sustainable, smart operation to keep things in balance for the long term. These kinds of things don't have to be mutually exclusive."

Like the lands they manage, BLM management has changed over time too. The mandate of "multiple use and sustained yield" was originally dominated by livestock grazing, but now includes mandates for renewable energy, minerals, water, and conservation. It's not always easy to find the center of that many-pronged pendulum. And not the least of the challenges is people often don't know when they are standing on BLM land, explains Hallows.



Rangeland research helps provide the foundation for land management across the West. Grazing, much like wildfire or drought, is now understood to be a force for change on an ever-changing landscape.



RANGELANDS ARE WORKING LANDS. NOT JUST FOR LIVESTOCK, BUT FOR HOW OUR WORLD OPERATES ... AND OUR UNDERSTANDING OF THEM HAS CHANGED ALMOST AS MUCH AS THEY HAVE OVER THE YEARS. — ERIC THACKER

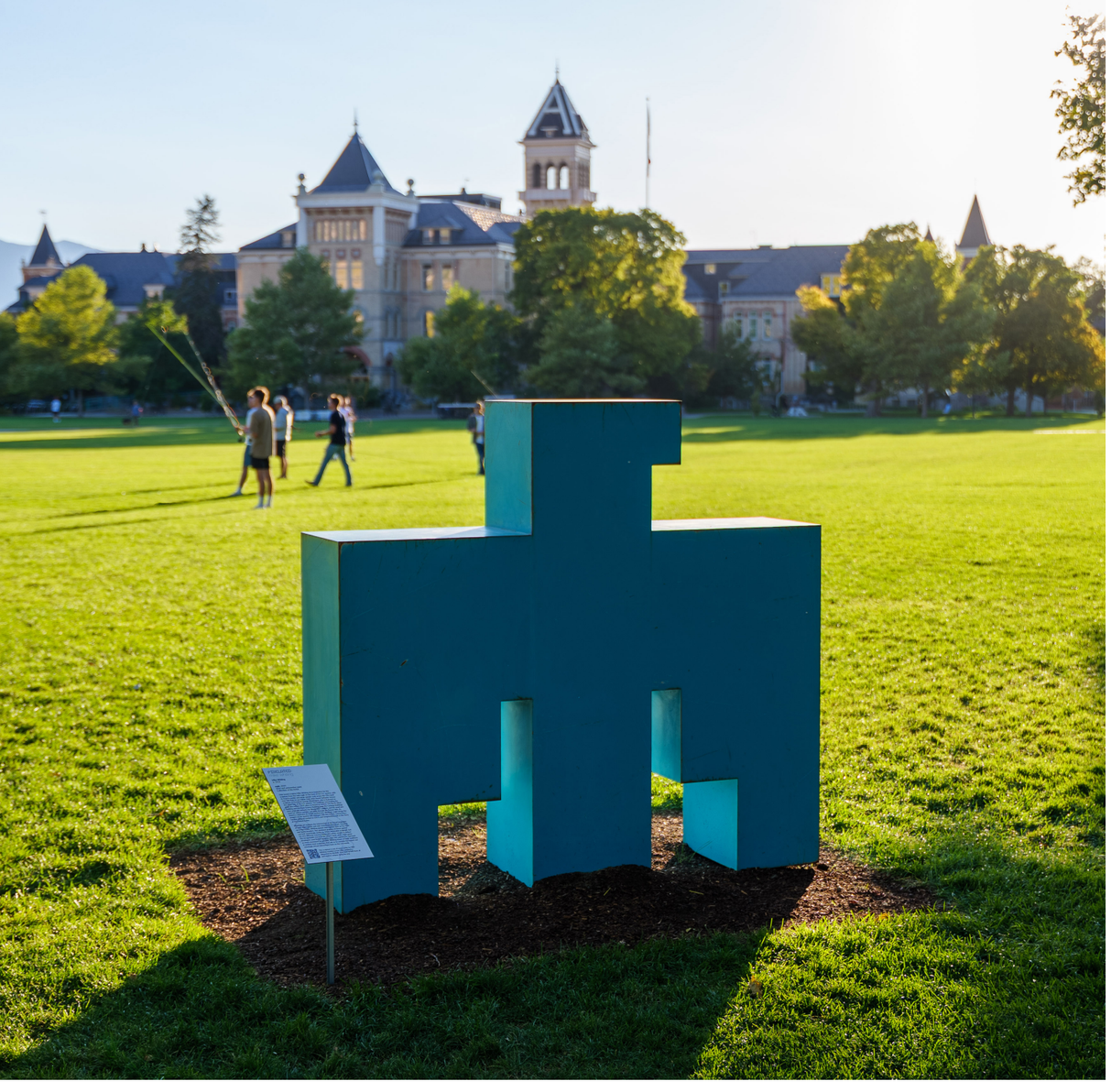
Rangelands make up more than 80% of the lands in Utah and more than half the lands in the West. Basically, if it's not dense forests, plowed, irrigated farmlands, or completely barren places like sand dunes, it falls into the category of rangeland.

And more and more people are standing on it. Recreation is becoming an increasingly important use of rangelands. Hiking has increased significantly in the last decades. Off-highway vehicles, birding, and mountain biking are increasing at steady rates. Fishing and hunting have long attracted huge numbers of passionate, invested users.

The biggest challenge rangelands face today, according to Wirick, is getting people to see it for what it offers, and to care about it for the future — to pay enough attention to understand how much we rely on these complex systems.

His advice: Look up.

"Take a look outside your car window the next time you visit rangelands," he says. **A**



The 8-Bit Outdoors

PIXELATED SCULPTURES BRING THE DIGITAL WORLD INTO THE LANDSCAPE

By Chiara Elwood Sorensen · Photos by Levi Sim

What happens when the pixelated visual language of video games leaves the screen and enters the landscape?

This year, Utah State University's Nora Eccles Harrison Museum of Art will invite visitors to explore that question with a campus-wide exhibition that brings the aesthetics of the digital world into conversation with the natural one.

Installed across the university's Logan campus, as well as select USU Statewide locations, the *Pixelated: Mike Whiting* exhibition will feature artist Mike Whiting's large-scale steel sculptures inspired by the blocky graphics of early video games. Brightly colored animals and objects will appear among gardens, pathways, and outdoor spaces, transforming familiar surroundings into something simultaneously retro and entirely new.

But *Pixelated* is about more than digital gaming. In an era where so much of life is experienced through screens, the exhibition invites viewers to step outside and reconsider how technology shapes the way we experience the actual world around us.

Born in Provo, Utah, Whiting's work has been exhibited around the world. His work draws from two distinct visual styles — the 8-bit graphics of early video games and the geometric forms of minimalist art. He has long been fascinated by how the opposite intents of these two artistic approaches arrived at similar visual outcomes by entirely different means.

Early video games like *Pac-Man* and *Space Invaders* relied on simplified graphics because the limited processing power and memory of the day's technology meant designers were required to communicate as much information as possible using a small number of pixels. Minimalist artists of the 1960s intentionally stripped away detail in pursuit of what they viewed as the essential qualities of art.

"Video gaming and Minimalism arrived at the same visual conclusion through different means and by opposite intentions," Whiting writes in his artist statement, an observation that became the foundation of his artistic practice.

With welded half-inch steel and automotive paint, Whiting transforms digital imagery into objects with weight, scale, and both visual and physical presence. Deer, birds, sailboats, and other recognizable forms emerge from a vocabulary of squares and geometric surfaces. The use of material is central to his message, with intentionally scuffed paint and exposed patches of metal reminding viewers that these forms are not virtual images, but hefty objects anchored to the landscape and that the "invisible" electronic world is real and consequential.

The works occupy a space between abstract and representational art, technology and nature, playfulness and serious artistic study.

An important moment in Whiting's development came while he was studying sculpture at the Pratt Institute in New York. During a visit to the Museum of Modern Art, he encountered Piet Mondrian's *Broadway Boogie Woogie* (1943) and was struck by how much it resembled the visuals of early arcade games.

For Whiting, the painting and the video game seemed to speak the same language.

Yet as his pixelated sculptures became more ambitious, he realized they required something more than the traditional white walls of a gallery. The work belonged outdoors. Its scale and subject matter called for parks, gardens, streets, plazas, and public spaces. A pixelated deer seemed more at home on a patch of grass than on a museum pedestal, and a brightly colored bird could merge with the landscape itself.

That realization led Whiting toward public art. Over the past two decades, his increasingly monumental sculptures have appeared in cities and communities throughout the country. He has installed them anywhere from skate parks and pedestrian districts to rail corridors and nature trails. Placed directly within the environments they reference, the works take on a life of their own, blending the digital world many people increasingly inhabit with the physical landscapes beneath their feet.

Pixelated — the first instance of Whiting's work being installed across an entire college campus — will continue to explore this conversation between digital and physical worlds within the USU community.

"Gardens are in their own way virtual spaces — carefully created environments," Whiting says. "The contrast of the sculptures' geometric and manmade materials can seem at odds with the gardens, but they are connected in the dialogue about the re-presentation of nature."



Utah artist and native Mike Whiting oversees the unloading of a sculpture from his *Pixelated* exhibition. Located around USU's Logan campus and select Statewide locations, the sculptures bring the aesthetics of the digital world into the natural one.

A garden may feel natural, but it is typically a carefully designed space. Paths are mapped, soil is tested, plants selected, and views intentionally created. Like a digital environment, it is a constructed experience. By placing pixel-inspired sculptures in a crafted outdoor setting, Whiting encourages viewers to think about the ways humans shape both physical and virtual worlds.

The exhibition arrives at a moment when questions about technology and wellbeing have become increasingly relevant — especially in a university setting. Much of modern life now unfolds online and our work, education, communication, and entertainment are often experienced through digital devices.

Rather than completely rejecting technology, Whiting's sculptures invite viewers to reflect on its influence. Video games traditionally translate the real world into pixels. Whiting reverses the process, taking digital forms and returning them to the landscape through steel, color, and scale. Visitors encounter the works not through a screen but through movement by walking around them, seeing them in changing light, and experiencing them within the landscape.

The artist's emphasis on place makes Utah State University a fitting setting for the exhibition. The university has long celebrated the outdoors as both a classroom and a source of recreation, utilizing its proximity to Logan Canyon and Cache Valley to benefit students' education. The outdoors, as the exhibition suggests, can be a place not only for recreation but also for artistic discovery and imagination. **A**

BY PLACING PIXEL-INSPIRED SCULPTURES IN A CRAFTED OUTDOOR SETTING, WHITING ENCOURAGES VIEWERS TO THINK ABOUT THE WAYS HUMANS SHAPE BOTH PHYSICAL AND VIRTUAL WORLDS.













From birds to pretzels to waves, Whiting's artwork draws from the distinct visual styles of early 8-bit video games and the geometric forms of minimalist art. The exhibit invites viewers to consider how technology shapes the way we view the world around us.



Clearing the Way

Pratts Restore Land & Support Rural Students

By Jeff Hunter '96 · Photos by Levi Sim

It's a unique vocation that comes with the expectation of being either very cold and wet, or extremely hot and dry.

But it can apparently also be dark and eerie.

"We've had grown men call just bawling," Scott Pratt says of the unique adventure of being alone in the wetlands surrounding the Great Salt Lake in the middle of the night. "They've been on the phone just sobbing.

"I think it's an experience that more people need to have, but a marsh is not a quiet, peaceful environment. You've got things making noises and chirping and squeaking and howling."

The president of PMG Vegetation Control, Pratt and the company he co-founded two decades ago with his wife, Mindy, has played an enormous role in recent years removing the massive reeds known as phragmites from along the eastern edges of the Great Salt Lake. Considering that some of the "phrags" grow upwards of 16 feet high, PMG utilizes a distinctive piece of machinery known as a Marsh Master — a fully amphibious, tracked buggy designed to travel and work in swamps and wetland areas.

The Marsh Masters spray, crush, and mow down invasive weeds like phragmites, which behave like gigantic straws, consuming twice the water of native plants and draining the ecosystem of precious water. The phragmites also disrupt waterfowl and shorebird habitats, and when dried out, the reeds can also be a huge fire hazard.

"It's probably the most unique place in the world for phragmites to grow," Scott says of the Great Salt Lake. "It becomes a super plant. It loves those environments, and the more phrag grows up, it does several things. It consumes water, so it

doesn't make it to the lake. It forms a dense berm that keeps water from getting to the lake. And then it erases all the habitat, which is critical for the Pacific Flyway.

"So, all of that stuff really impedes progress towards a healthy lake."

Due to the immense number of birds that make their way through the area — the Bear River Migratory Bird Refuge sits at the northeast edge of the lake, along with several duck-hunting clubs — PMG is unable to work during the nesting and hunting seasons, which leaves a rather brief period of time from mid-January to May 1, for the Marsh Masters and their crews to wage war against the phragmites.

"We have a short window to work with when the birds are nesting or we would disrupt the hunting experience, so we are running those machines 24 hours a day during certain times," Scott explains.

PMG kept six Marsh Masters going practically around the clock last winter and spring. But that also meant the Pratts, both graduates of Utah State University who live in Richmond, had to field distress calls from employees in the middle of the night when equipment broke down or got bogged down in the wetlands. Then there's also the possibility of someone getting lost in a forest of phragmites.

"During the day, you see the mountains; that gives you comfort," Scott acknowledges. "But at night, you can get turned around. There's no lights, but maybe Antelope Island, or Northrop Grumman, and some salt operations. All of a sudden, you can be out in the middle of nowhere, and you literally lose track of where you're at."

Mindy adds, "You've got the phrag all around you, and you can't see in front of you, and you can't see behind you. And while you feel like you're going up and down, you don't know if you're going up and down."

On the plus side, since it was such a temperate and dry winter last year, weather wasn't as much of a factor as usual. The state was able to burn large areas of phragmites in the spring, and Scott says PMG ended up mowing down more than 6,000 acres of the noxious reeds.

"That's bigger than quite a few cities in Cache Valley," he notes. "We literally mow it all to the ground and it exposes the soil and native plants come back up. And we hopefully then change the community to something that supports better water flow, better wildlife habitat, and help create a better experience for people who enjoy the lake."

And sometimes, that "better experience" applies even to the Marsh Master crews themselves, who are out on the frontlines of the state's battle with the phragmites that encompass more than 180,000 acres and suck up more than 70,000-acre feet of water each year from the continually shrinking Great Salt Lake.

"We get to be in some places that not many people go," Scott says with a smile. "And I would stack the beauty of being out there against anything in the mountains. People don't realize how beautiful it is. It's hard to see. But when you get out there, the sunsets are just gorgeous."

Viewing Landscapes Through a 'Different Lens'

It's fair to say that taking a road trip with the Pratts might come with a bit of a downside. Call it a vocational hazard, but thanks to their training and their careers, they see things a little bit differently than most people when traveling down a highway.

"Oh yeah, we're always looking for invasive species when we travel," admits Scott, who graduated from Utah State with a degree in animal science in 1997.

"But we still enjoy it," adds Mindy, who also completed a bachelor's degree at USU in '97 in range science, then later earned a master's in natural resources in 2005. "But having studied rangeland ecology, I can't even drive like to St. George without going, 'Oh look, they're way overgrazing,' or 'Hey, look at that, they've done a bunch of chaining up there, and you can see where they've made a bunch of new habitat,' or I see old fire scars.

"You just you just look at the world through a different lens."

That lens led to the Pratts getting what would become PMG Vegetation Control off the ground in 2005, and then officially starting the company two years later.

"About 2005 is really when we started contracting," Scott recalls. "And it was 2007 when we said, 'We better make this legit and really go for it.'"

Based out of its headquarters in Richmond, PMG Vegetation Control normally has around 40 to 60 primarily seasonal employees on the payroll who work out of other satellite locations around Utah, as well on projects in 10 other states, including Idaho, Wyoming, Arizona, and Texas.

In addition to taking on phragmites around the Great Salt Lake, PMG helps eliminate other unwanted growth and invasive species for clients like the Bear River Migratory Bird Refuge, Utah Division of Natural Resources, PacifiCorp and Idaho Power. The company also specializes in rights-of-way and site maintenance, as well as providing data-backed tracking via GPS and GIS mapping and other technology.

The parents of four children, the Pratts met while students at USU and got married a week after they both graduated. Mindy is native of the Lehi area, who originally planned to attend USU as a freshman and study natural resources.

"I actually enrolled at Utah State and was all ready to go, and then at the last minute changed my plans, went down to Snow College, and kind of pursued animal science down there," she explains. "And then it was just a natural fit to come back up here after I graduated from Snow."

Scott Pratt grew up in Snowville as the son of fish and game officer who covered a huge part of the state south of the Utah-Idaho border. Attending USU was a natural fit for the Bear River High School graduate, but he felt even better about his decision after seeing Mindy for the first time at the "Bull Pen" game room and recreation area that used to be located on the bottom floor of the Taggart Student Center.

"I'd had a good experience through FFA and different things where I interacted with the university, and a lot of my friends





TOP: Scott and Mindy Pratt, both 1997 graduates and co-founders of PMG Vegetation, have made a significant impact battling invasive plant species at the Great Salt Lake and supporting students at Utah State. BOTTOM: A Marsh Master cuts through phragmites.

and people from the community were going to Utah State. So, I thought that was a great place to start," Scott recalls. "Then I got over here, started in the College of Agriculture in animal science, and then I met Mindy."

Following Commencement and their wedding in 1997, the Pratts relocated to the tiny community of La Sal in San Juan County so Mindy could work on a project near Monticello for the Natural Resources Conversation Service. During that time, Scott worked for a local livestock company, but thanks to responding to an ad in the newspaper, he also found himself in a unique situation serving as chairman of a multi-stakeholder group tasked with managing what would become the Bear Ears National Monument in 2016.

"I went to the first meeting, and there was a lot of contention in the room. So much contention that the facilitator said, 'Well, we need a chairman,'" Scott remembers. "And they all turned and looked at me and said, 'What are you? Twenty-one? And you graduated from Utah State. You must be neutral and smart. So, we're going to elect you.'

"They elected me chairman, and we talked about everything from the heritage and the cultural resources, to protecting mining and agriculture and increasing recreation and other demands — two decades before it was made a monument. … I just got thrown right into this fire, and, all of a sudden, I'm using everything from some of the range science classes Mindy talked me into taking, to building relationships with all these people from both sides of the issue — well, actually, six sides of the issue — and trying to do it in a very neutral way."

While that proved to be a very fruitful learning experience for Scott, the Pratts returned to the Logan area in 2000, when he took a job working for Rocky Mountain Power managing the wetlands in the central portion of Cache Valley and Mindy was hired as a USU Extension specialist. Mindy ended up working for Utah State for 15 years before ultimately stepping down to help manage PMG on a full-time basis.

But the Pratts have maintained strong ties with the university — many of PMG's seasonal employees and interns are USU students — and earlier this year, the Pratts announced they'd established two new scholarships in the S.J. and Jessie E. Quinney College of Natural Resources: The Leadership in Working Landscapes Scholarship Endowment and the Pratt Leadership Award.

"We just saw a great opportunity to give back to the university," Mindy says. "And I felt like they were really losing the rural component in that college. It seemed like those kids had really dropped away."

"That rural component is big," Scott adds. "We both enjoyed the experience of growing up in small towns in rural Utah and being able to contribute to the overall health and wellness of the landscapes around our communities. Over time, we realized that perspective was being lost, and there were fewer and fewer rural people in the College of Natural Resources. … And the more we thought about it, we felt like we needed to get more of Utah's rural kids involved in understanding these disciplines, being aware of them, and be given opportunities to succeed."

Scott acknowledges he doesn't "fly on private jets and have billions of dollars to support the university," like some other donors, but he notes that PMG Vegetation Control is "just a small business that is happy to provide jobs and learning opportunities."

"We enjoy supporting the lands around us," he proclaims. "And the one thing this experience has made us realize is that our ability to contribute and give back and help provide that leadership and build the next generation of people who will tackle those problems head on doesn't require that level of success." **A**

"The one thing this experience has made us realize is that our ability to contribute … and build the next generation of people who will tackle those problems head on."

— Scott Pratt



Invasive phragmites behave like massive straws, consuming twice the water of native plants while also disrupting waterfowl habitats.



CERVIDS UNDER Attack

HOW PARASITES AND DISEASES ARE RESHAPING UTAH'S BIG GAME WILDLIFE

By Adrien Bastidas '30, Megan Morrison '31, and Sammy Baron '27 · Photos by Levi Sim

Utah is a state defined by its unique landscapes. Ranging from red-rock deserts and rugged canyons to dense conifer forests and alpine peaks this state is home to some of the most iconic wildlife in the West.

Mule deer, elk, and moose — the "King of the Forest" — are an irreplaceable part of what makes the state's outdoors so special whether you admire these animals from a hiking trail or pursue them through Utah's rich hunting tradition.

Yet beneath the beauty of Utah's great outdoors, its big game animals are facing pressures from a growing, silent threat. Emerging diseases, blood-sucking parasites, and changing environmental conditions are increasingly influencing the health, survival, and future of these species. An impact that could result in large implications for the ecosystems these animals call home.

As temperatures change and wildlife distributions shift, parasites and diseases are finding more opportunities to spread across Utah's mountains and valleys. Researchers at Utah State University are working to understand how threats such as chronic wasting disease, arterial worms, and winter ticks are affecting Utah's ungulates. Winter ticks have become an increasing concern for Utah's moose, the southernmost, naturally occurring population in North America, CWD continues to expand into mule deer and elk populations across the West.

Together, these threats raise questions about what the future of cervids in Utah looks like.

"Moose in Utah pose a very unique opportunity to study how animals at the edge of their range are able to adapt in order to survive and continue expanding," says T.J. Clark-Wolf, an assistant professor in USU's Department of Wildland Resources and Ecology Center. "By having a clearer image of how their population is doing, we can predict what the future may look like not just in Utah but across their species' range."

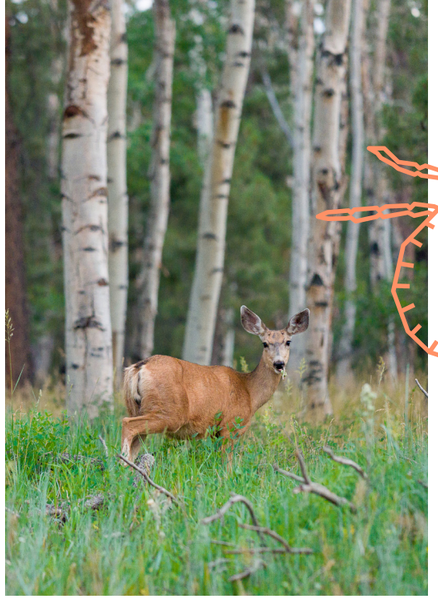
The consequences of winter ticks are already well documented on the East Coast. In Maine and New England, infestations have caused moose calf mortality rates approaching 70% in some years. Heavily infested adults can carry more than 150,000 ticks, often leaving them with a pale appearance because the animals rub off their dark topcoat due to extreme itching. It's a phenomenon that's earned the animals the nickname "ghost moose" and it's now unfolding in Utah.

Since naturally expanding into the state during the early 1900s, moose have become one of the Utah's most recognizable wildlife species. Today, the largest population occupies the Wasatch Mountains where winter ticks can be abundant. USU researchers have been tracking the parasites' potential impacts on the moose for over a decade.

Winter ticks are not the only major concern for moose. While this external parasite poses great risks for their health, the arterial worm is an internal parasite that's also problematic. Spread to moose when infected deer and horse flies feed on their blood, these tiny nematodes move from the fly's mouth to a moose's inner skin. From there, the arterial worm circulates to the moose's cerebral arteries where it can grow too large for the artery, causing a rupture. Consequently, moose may appear to have cloudy eyes and dead tissue around their snout and ears. In severe cases, the arterial worm can even kill its much larger host.

At Utah State, Dr. Clark-Wolf's lab and Dr. Sarah Weinstein's lab, as well as the Utah Division of Wildlife Resources, are working together to better understand







LEFT: Research technician Leah Lauritson uses a triangulating antennae array to locate deer with radio/GPS collars in the La Sal mountains. BOTTOM RIGHT: Sammy Baron assembles parasite collection devices that are dragged through brush to collect ticks and other bugs.

the pressures winter ticks and warming climates put on our moose populations.

"Knowing where and when animals like moose are most likely to encounter these parasites, and how their habitat preferences overlap with infection risk can help in developing management plans that support healthier wildlife populations," Weinstein explains.

Graduate students Adrien Bastidas and Sammy Baron have taken on two sides of this question to dive deeper into this problem. Bastidas is hoping to identify whether moose use behavioral strategies to survive hot, parasite-rich environments by seeking high-elevation landscapes that provide cooler temperatures and potential refuge from winter ticks. Baron's research focuses on identifying where winter ticks and arterial worms pose the greatest risk. By trapping and collecting parasites across the landscape, she is mapping areas where moose may be the most vulnerable.

Despite these pressures, Utah's moose population has continued to slowly grow.

However, these problems are not just confined to wilderness areas. In neighborhoods where mule deer and elk often intersect, they risk spreading chronic wasting disease — a fatal neurological disease that affects cervids, including deer, elk, and moose. First identified in captive mule deer in Colorado in 1967, CWD has continued to spread and has now been documented in free-ranging populations across 34 U.S. states, four Canadian provinces, and parts of Europe.

Often referred to as the "zombie deer disease," CWD causes progressive degeneration of the brain, resulting in severe weight loss, abnormal behavior, loss of fear of humans, and ultimately death. This disease spreads efficiently through both direct contact between animals and indirect exposure to contaminated environments, where infectious prions can persist for years. Infected animals may carry and shed the disease for months before showing clinical signs, making surveillance and disease management particularly challenging.

Currently, the only reliable way to diagnose CWD is by testing tissues such as lymph nodes or the brainstem after an animal has died.

The first cases of CWD in Utah were detected near Vernal and Moab in 2002. Since then, the disease has continued to expand across the state. As of February 2026, 435 mule deer and 11 elk have tested positive for CWD in Utah, with the highest prevalence in the deer population — approximately 20% — occurring in the La Sal unit.

Beyond its effects on individual animals, CWD threatens the long-term health and sustainability of deer and elk populations, resulting in ecological, economic, and cultural consequences that cost the United States tens of millions of dollars each year. In response to the growing threat of CWD to Utah's mule deer, Dr. Kezia Manlove's laboratory at USU has partnered with the UDWR and the USDA National Wildlife Research Center to develop a test capable of detecting the disease in live animals.

That test detects prions — abnormal proteins that can cause fatal brain diseases — from samples such as nasal swabs and ear biopsies. While it has not yet been validated for diagnosing CWD, early results are promising and have closely matched postmortem diagnoses.

Researchers hope this work will improve our understanding of how warm winters in Utah may severely limit our moose populations by positively contributing to winter tick survival and reproduction, as well as how CWD develops and spreads.

By enabling earlier detection of infected animals and providing wildlife managers with new tools to monitor disease spread, they can make more informed management decisions aimed at conserving healthy big game populations for the future.

"This research can help managers direct limited resources toward the places and populations where action is most likely to make a difference. It can also provide a foundation for evaluating whether those actions are improving survival and sustaining Utah's deer, elk, and moose over time," says Daniel Macnulty, a professor in USU's Department of Wildland Resources. **A**

SAMMY BARON'S RESEARCH FOCUSES ON IDENTIFYING WHERE WINTER TICKS AND ARTERIAL WORMS POSE THE GREATEST RISK. BY TRAPPING AND COLLECTING PARASITES ACROSS THE LANDSCAPE, SHE IS MAPPING AREAS WHERE MOOSE MAY BE THE MOST VULNERABLE.



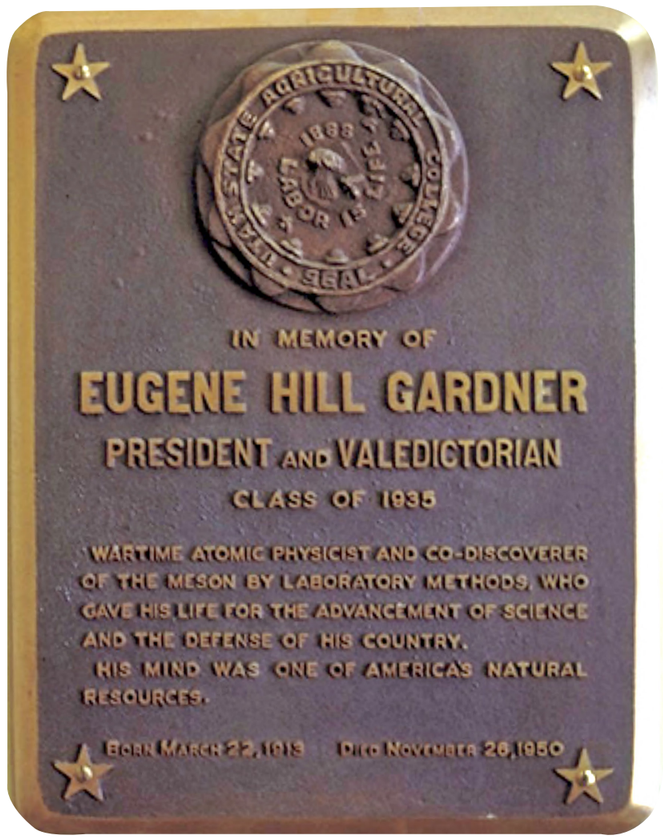


TOP: A moose moves through the trees in the forest near Mt. Timpanogos. BOTTOM: Adrien Bastidas uses a triangulating antennae array. The GPS give a few data points throughout the day, but the radio is always working for triangulating live locations.

Eugene Gardner

UTAH STATE'S TRAGIC GENIUS

By Jeff Hunter '96



In the early 1950s, Utah State University was still known as Utah State Agricultural College, and what would come to be known as the Taggart Student Center was simply called the Student Union Building.

When the much-anticipated grand opening of the new SUB officially happened in May 1953, USAC students were greeted by a large painting of a man wearing a beige lab coat over a white shirt and dark tie. At the time, there were professors and administrators still on campus who were familiar with the man in the portrait.

Eugene Gardner had graduated from Utah State 18 years earlier as both the valedictorian and the senior class president. But by 1950, one of the brightest minds ever to come out of the university was gone.

A renowned nuclear physicist who played a significant role in the United States' development of atomic weapons during World War II, Gardner ended up with berylliosis — a condition that he developed due to inhalation of toxic dust while working with the metal beryllium in the early '40s — which led to his death at the age of 37.

Three years later, Gardner was memorialized in a brief tribute in Utah State's yearbook. Known as The Buzzer, the piece was likely written by editor Darrell Deem and included a black-and-white version of the portrait from the SUB, albeit with Gardner's hands and microscope cropped out at the bottom of the painting.

A portrait of a serious, sensitive young scientist was hung in Utah State's new student union building this year as a symbol to us — indeed to all Americans — of the highest courage which human beings display. This brilliant nuclear physicist, only thirty-seven at his death in 1950 was Dr. Eugene Gardner, a native of Logan, whose important work in atomic research resulted inadvertently in his death. Dr. Gardner was educated at Utah State. Many remember him as senior class president and valedictorian, class of 1935. Oak Ridge, Los Alamos, and the University of California were the scenes of his research. He and a colleague are credited with discovery of the meson rated among the most fundamental advances in twentieth century physics. It is for us, his successors, to pay him and all men like him tribute by following his example and devoting our talents to the service of our fellowmen. He gave his last full measure in the interest of mankind and in doing so, made his own name immortal.

'Genius' Gets to Work

MaryJane Gardner Neville wasn't born until 1952 — two years after her Uncle Eugene passed away in California.

The daughter of Eugene's older brother, Eldon Gardner, Neville grew up in Logan, graduated from Utah State University and lived much of her early life in the same house on 100 South where her father and uncle were raised.

"But I never heard my father talk about him growing up," Neville says of Eugene. "Of course, I am the youngest of six children, so I think the older kids got a lot more than I did. ... But because I didn't know anything about (Eugene), I think that's why I started writing these stories because it very fascinating to me to find out more about him."

In 2018, Neville compiled a brief biographical sketch of Eugene Gardner that included many of the memories Eldon had of his brother, who was nearly four years younger than him.

A longtime Utah State professor who passed away in 1989, in the last few years of his life, Eldon wrote a personal history to pass along to his posterity. And using her father's notes — as well as some memories from others who knew him — Neville was able to share some insight into Eugene's life that wasn't found in the newspaper and magazine stories that focused on his scientific career.

"My dad was amazing; I'm very impressed with him," Neville says of Eldon Gardner, who served as the first dean of USU's College of Science. "But he always said his brother was a genius, and he was much smarter than he was. He always stood up for [Eugene] and had great admiration for him."

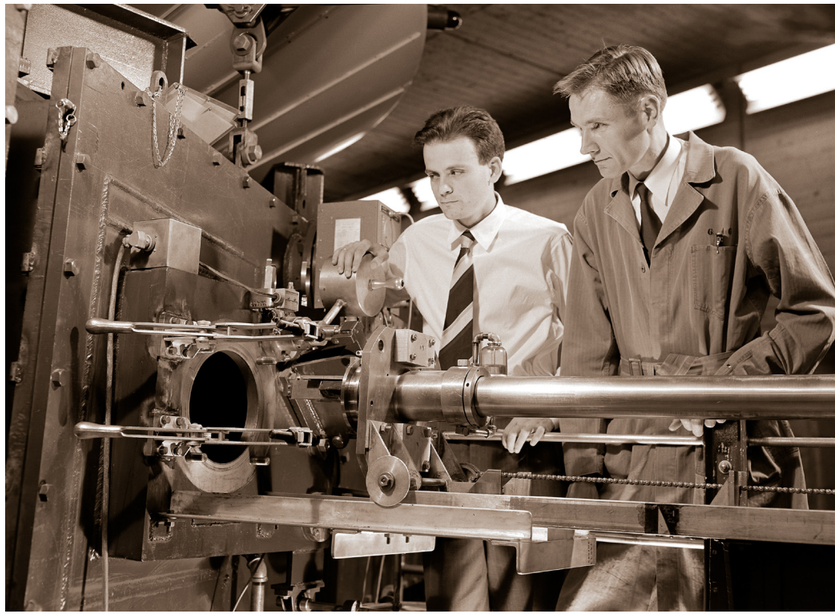
Born to John and Cynthia Gardner on March 22, 1913, Eugene was the second of the couple's five children — twin sisters, Lucille and Marian, were born when he was 4, while brother William died shortly after birth. Unfortunately, another tragedy soon followed, and Eugene had to grow up extremely quickly. In October 1920 when Eugene was just 7 years old, John Gardner was attempting to fix a hot plate when he was electrocuted and died in the kitchen at the age of 40.

To help provide for her family, Cynthia returned to work as a teacher at Woodruff Elementary School, while Eugene worked a variety of jobs as he got older, including that of paperboy, gardener, and store clerk. The start of the Great Depression in 1929 made life even more difficult for the Gardner family, but Eugene excelled at Logan High School, and he was involved in student government, the theater program, and also served as the editor of the school newspaper and yearbook.

"Eugene knew where he was going," Eldon Gardner recalled. "He excelled in mathematics and physical science. In school, he was given extra assignments in

"I WANT THEM TO BECOME MORE THOUGHTFUL AND INTENTIONAL DESIGNERS OF HUMAN EXPERIENCES."

— JESSE JONES



In this photo from March 1948, Brazilian scientist César Giulio Lattes, left, and Utah State graduate Eugene Gardner are shown standing next to the nuclear emulsion positioning apparatus of the 184-inch cyclotron they used to conduct experiments. ***Photo courtesy of the Department of Energy and Lawrence Berkeley National Laboratory.***



Longtime Utah State professor Eldon Gardner kept a portrait of his younger brother, Eugene, that was painted by Eugene Montgomery on the wall in his office. ***Photo courtesy of MaryJane Neville.***

all of these courses to keep him busy and interested. … He was an outstanding student, and besides his ability and interest in scientific fields he had much ability in speech and English.

"His school friends nicknamed him 'Genius,' not in derision but out of respect. … In school (Eugene) didn't seem to study much. In enforced study periods he became

restless. He read rapidly, retaining what he had read after the first reading and was soon bored. He found other things to do that were not always in keeping with the lesson or the rules of the school room. Yet scholastically, he was at the top."

Despite the grievous manner that his father died, Eugene Gardner developed a strong interest in electricity and building and operating mechanical devices. His upstairs bedroom soon became off-limits to all visitors, and according to Eldon, "Was filled with copper wire, springs, bolts, used transformers, and other 'valuable' construction items that had been carried or dragged home from the Logan City dump, a half mile west of our home."

"He built a telephone system and a radio, and he worked out experiments in a college physics laboratory manual all alone in his own bedroom. Mother despaired of any organization or prospects for cleaning up the room. It was left entirely to Eugene, and he appreciated the total responsibility for the appearance of his room."

Eugene's sister Lucille shared similar memories of Eugene's unique living space.

"Eugene was always playing around with electricity and doing experiments. He scared us to death!" she said. "He had the doorknob to his room wired so no one could get into it and bother his things. He left and entered his room by his bedroom window walking on the second-story roof and somehow dropping to the ground."

And once he graduated from high school, Eugene Gardner hit the ground running at the university level.

"As soon as high school was out in May 1931, Eugene was on the (USAC) campus getting acquainted in the physics department," Eldon noted. "He took a full load of summer quarter classes."

Serving His Country

Eldon and Eugene Gardner ended up on campus together in 1931, after Eldon had served a mission for the Church of Jesus Christ of Latter-day Saints in California. Eldon was a sophomore the year Eugene started school at Utah State Agricultural College, and the young Gardners were both interested in physics, partially due to the influence of their uncle, Williard Gardner, who was an esteemed professor and soil physicist.

By the time Eugene was a sophomore, he was already serving as a teaching assistant in the physics laboratory and was helping to teach some of the classes he hadn't even taken yet.

Maevonne Rees Moench, a cousin in-law, remembers encountering Eugene for the first time in a physics class in 1934: "He was so sharp; the professor turned the class over to him to teach. He carried a pocketful of class cards in his pocket. He was friendly, charming, and so good looking that any girl would have singled him out as the prince charming of the crowd. Yet, he showed no vanity. He was elected President of his class, but learning was his whole ambition. He was good as he was bright."

During his senior year, Eugene was nominated for a Rhodes Scholarship, but according to Eldon, who graduated from USAC in 1934 and went on to attend graduate school at the University of California, Berkeley, "He did not impress the committee in his oral response to questions about goals and objectives. At this time, Eugene had not yet become involved in research. He appreciated good teachers and was making every effort to be a good teacher in his TA assignment. Yet, the committee members thought he showed 'no ambition by merely wanting to teach."

That evaluation of Eugene Gardner would prove to be far off the mark over the next decade and a half. But then, he was also involved with numerous other pursuits beyond physics while attending Utah State. In addition to being named valedictorian, Gardner successfully ran for senior class president and continued to act in student theater productions.

"Eugene was not a recluse scholar," Eldon pointed out. "He was around the entire campus, and many faculty members and students were warmed and cheered by Eugene's happy smile and warm friendly greeting. He was involved in school activities and was around the entire campus on various errands and goodwill projects."

Eugene Gardner also managed to find the time to fall in love with Dorothy Johnson, who grew up primarily in Richmond before attending USAC to study English. Dorothy was named the Class of 1936 valedictorian, and the couple was married shortly afterwards on June 25, 1936.

At the time of their wedding, Gardner was teaching physics and mathematics at USAC, but in August 1937, he and Dorothy followed in Eldon's footsteps and moved to Berkeley to both start graduate school. Dorothy completed her master's in English in 1939, the same year Eldon was awarded his Ph.D., and Eugene decided that he missed teaching and Cache Valley.

"Because we were short of money, he returned to Logan during the academic year 1939-40 to teach at the AC again," Dorothy said. "Gene was very good with people. He would have made a wonderful teacher. He knew how to draw people forward, to draw things out of them, without making them feel dumb."

But after two years of teaching at Utah State, Eugene decided to return to his pursuit of a Ph.D. at Cal. Once back in Berkeley, he focused his research on the study of cosmic rays under the mentorship of Ernest Lawrence, the founder of the Radiation Laboratory (now the Lawrence Berkeley National Laboratory) and the 1939 Nobel Prize honoree in physics for inventing the particle separator known as the cyclotron.

Knowing that Germany was working on developing an atomic weapon at the outset of World War II, the U.S. government was already working towards a similar goal when the Japanese attacked Pearl Harbor on Dec. 7, 1941. What would become known as the Manhattan Project quickly pressed Lawerence and other nuclear physicists into service in the race to produce the world's first atomic bomb.

"The U.S. government immediately interrupted Eugene's studies and drafted the whole science lab and all the scientists (a high-level research team), including Eugene, to do research on radioactive material," Eldon said.

After spending the first couple of months of the war in Berkeley working on the process of uranium isotope separation, Eugene Gardner was sent to the Oak Ridge National Laboratory in east Tennessee. Dorothy wasn't even sure where he was or what he was doing for a few months, but she was eventually allowed to relocate to Oak Ridge, where Eugene spent a total of two years before being reassigned to Los Alamos National Laboratory in New Mexico. During his time in Tennessee, Gardner did manage to complete work on his Ph.D. in 1943, but because his dissertation, which was entitled "An Investigation of Arc Discharges," contained classified data, it was never published.

The Gardners' stay in New Mexico was rather short — with Eugene also spending time at the testing grounds in Wendover as he worked on the development of an implosion method and a detonation fuse for a plutonium weapon — and the couple returned to Berkeley in the fall of 1945, shortly after the United States orchestrated an end to World War II by dropping atomic bombs on the Japanese cities of Hiroshima and Nagasaki.

However, the Manhattan Project endured through August 1947, and Gardner continued his scientific research at the Radiation Laboratory, not knowing that he had already sealed his fate during the early days of the war.

Achievements and Tragedy

A year after the Manhattan Project end, Eugene Gardner made scientific history.

Working alongside celebrated Brazilian physicist César Giulio Lattes, Gardner used Ernest Lawrence's larger synchrocyclotron at Berkeley to record the first photographs ever taken of artificially produced pions.

Then referred to as pi-mesons, pions are a type of unstable subatomic particles known collectively as mesons that play a vital role in holding atomic nuclei together. Using the massive, 184-inch particle accelerator at the Radiation Laboratory, Gardner and Lattes proved that pions could be created in a controlled laboratory

setting rather than having to wait for naturally occurring, highly unpredictable cosmic rays to strike photographic plates at high altitudes.

"The work of Gardner and Lattes opened the newest new age since the discovery of fission. It might roughly be compared to the discovery of America," the University of California, Berkeley heralded at the time.

Gardner and Lattes published their finding in the journal Science in March 1948, leading to the duo being recognized throughout the nuclear science community.

An article in Time magazine heralded: "Many laboratories all over the world are greatly indebted to our American colleagues of Berkeley, California, for the very generous way in which, promptly and without conditions, they have exposed photographic plates to the particles provided by their machines. Gardner mastered the photographic technique and oversaw its adaptation to the cyclotron. The study of mesons might lead in the direction of a vastly better source of atomic energy than the fission of uranium."

But according to Dorothy, about the same time of his greatest scientific achievement, Eugene was also dealing with the symptoms of a worsening illness that had yet to be diagnosed.

"They consisted mostly of unusual tiredness and shortness of breath," she said. "He had always required great amounts of rest, and so the tiredness did not surprise us too much at first. But things did not improve, and eventually he was hospitalized for diagnostic tests (which proved inconclusive), and he was ordered away on a "rest cure" (which proved unhelpful). Finally, he was re-hospitalized for treatment of symptoms (since no real underlying cause had been identified)."

It would later be determined that Gardner had inhaled toxic dust while drilling a hole in an electrode made of beryllium oxide at Oak Ridge in 1942. At the time, the potential health danger of beryllium wasn't known, so proper safety precautions weren't taken by scientists like Gardner, who continued to work with beryllium well after the end of the war. He eventually developed the condition known as berylliosis, which severely affected the function of his lungs.

By the time Eugene and Dorothy's only child, a daughter named Claire, was born on July 4, 1948, Gardner was in and out of a hospital in nearby Vallejo. And eventually, doctors restricted all contact with Claire, and he was only allowed to see her through a window.

But while his heart was broken and his lungs were failing, Gardner's mental capacity was still strong. Even while in an oxygen tent dealing with tuberculosis and a painful case of shingles, he continued his research by studying meson photographs with a microscope right up until the day after Thanksgiving — Nov. 26, 1950 — when he passed away at the age of 37.

"Eugene's death was a severe loss to the scientific world," Eldon declared.

The rest of the world agreed, and stories eulogizing Eugene Gardner were printed in many large-circulation national publications, including Time, Newsweek, and The New York Times, as well as numerous scientific journals.

The short article in Time was headlined, "Science: War Hero" and included these final two sentences honoring Gardner: "During his final hours under an oxygen tent, knowing that death would no longer be denied, he worked with pencil and notebook, painfully gleaning his brain while he still had time for last bits of knowledge to pass along to the living. Last week at Vallejo, his work all but done, Dr. Gardner laid down his notebook and died."

For the Love of Science

Seventy-three years after the opening of the Student Union Building, the exact whereabouts of the portrait of Eugene Gardner is unknown. Painted by a man with the same first name, the Eugene Montgomery painting was taken down at the Student Union Building at some point and ended up in the hands of Eldon Gardner.

"I don't know how my father got it, but the portrait hung on the wall in his office for as long as I can remember," MaryJane Neville says.

In addition to serving as the dean of Utah State's College of Science, Eldon Gardner taught zoology and was dean of the School of Graduate Studies at the University of Utah. He was also a human genetics scientist who became one of the most esteemed cancer researchers in the country. The Eldon J. Gardner Teacher of the Year Award is given out annually to a USU professor in his honor.

But right up until his death in 1989, it's clear how highly Eldon revered his late sibling, Eugene.

"Rather than competing with or feeling jealous of his younger brother who overshadowed him — academically and in social popularity — Eldon was one of his greatest supporters and advocates," Neville proclaims. "When Eldon received scientific awards and accolades my sisters, Pat and Alice, remember him saying, 'Eugene was the smart one! I had to work really hard, but it came easy for Eugene. He was a genius. He was also well balanced, excelling in other areas besides physics. He was socially adept, great in drama and theatrics, and had a photographic memory.

"He had great admiration and respect for his brother."

As did his alma mater, who honored Eugene Gardner with a plaque that hung on a wall in Old Main until renovations to the historic building in the early '70s. Still housed in USU's archives, the plaque reads:

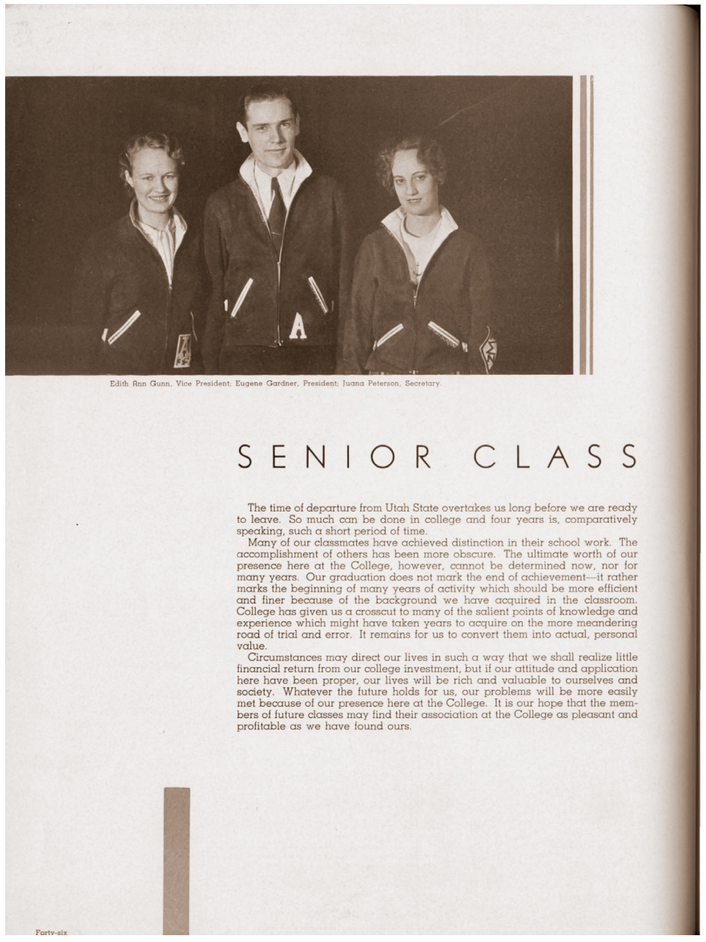
"In memory of Eugene Hill Gardner; President and Valedictorian; Class of 1935. Wartime atomic physicist and co-discover of the meson by laboratory methods who gave his life for the advancement of science and the defense of his country. His mind was one of America's natural resources."

Dorothy, who was married to Gardner for 14 years prior to his death, remarried about six years after his passing. Her second husband, Wilson Powell, was also a physicist who worked on the Manhattan Project and taught at Cal Berkeley after the war. Powell died in 1974, and Dorothy remained in northern California before passing away in 2004 at the age of 87. She is buried at the same cemetery in El Cerrito as both of her husbands.

The Gardners' daughter, Claire, is now 78 years old and still lives in the Bay Area, but she was too young at the time of his death to have memories of her father. Neville says her family has interacted with Claire through the years and has shared as much information about Eugene and his family with her as possible.



This photo celebrates the discovery of machine-made mesons by Lattes, left, and Gardner in February 1948. ***Photo courtesy of the Department of Energy and Lawrence Berkeley National Laboratory.***



Edith Ann Gunn, Vice President; Eugene Gardner, President; Juana Peterson, Secretary.

SENIOR CLASS

The time of departure from Utah State overtakes us long before we are ready to leave. So much can be done in college and four years is, comparatively speaking, such a short period of time.

Many of our classmates have achieved distinction in their school work. The accomplishment of others has been more obscure. The ultimate worth of our presence here at the College, however, cannot be determined now, nor for many years. Our graduation does not mark the end of achievement—it rather marks the beginning of many years of activity which should be more efficient and finer because of the background we have acquired in the classroom. College has given us a crosscut to many of the salient points of knowledge and experience which might have taken years to acquire on the more meandering road of trial and error. It remains for us to convert them into actual, personal value.

Circumstances may direct our lives in such a way that we shall realize little financial return from our college investment, but if our attitude and application here have been proper, our lives will be rich and valuable to ourselves and society. Whatever the future holds for us, our problems will be more easily met because of our presence here at the College. It is our hope that the members of future classes may find their association at the College as pleasant and profitable as we have found ours.

Forty-six

A native of Logan, Gardner served as Utah State Agricultural College's senior class president in 1934-35. He was also valedictorian and performed in student theater productions during his time on campus. ***From the 1935 Buzzer.***

But as time marches on, fewer people are familiar with Eugene Gardner and his contributions to the U.S. war effort in the 1940s. Neville, who completed a bachelor's degree in elementary education at Utah State in 1974, wants to keep Gardner's memory alive. But at the same time, she realizes that the idea of someone helping to introduce atomic weapons to the world isn't popular with everyone, "Even if his generation all believed they were doing the right thing; something that had to be done to stop the war."

"He wasn't interested in making a bomb; that wasn't his intention," Neville says of her Uncle Eugene. "He was just so excited about physics — that was really his love — and all of the bomb stuff was not his making. He was forced into it, and he did what he had to do.

"He just loved physics, and it was more than a job — it was also his hobby," she adds. "He loved to figure out problems, and it was challenging. But he had the mind for it. It was something that he loved to do, and he died doing it." **A**

Leave A Mark

For 25 years the Utah Conservation Corps has left a lasting impact on the state and its future conservation leaders

By Hazel Harris-Staples '27

Once the sun goes down while camping, the imagination comes alive. The wind through the trees, the gurgle of a stream, the rustling of a tent. Is there something out there or is the mind playing tricks?

For Trisha Cracroft, a 2001 Utah State graduate and current assistant state conservationist for the state of Montana, there usually was something out there. At least that was case when she was a member of the Utah Conservation Corps on a work crew in Zion National Park fending off fiendish ringtails.

"I got to spend a lot of time in Zion, dealing with woolly mullein and trying to keep ringtails out of our food at night," Cracroft recalls. "Almost every single stint I did throughout that year was pretty incredible, and I have a lot of fond memories of that time."

For the past 25 years, the UCC has given participants like Cracroft experiences and memories while working to develop the conservation leaders of tomorrow. Following in the footsteps of the Civilian Conservation Corps from the 1930s and '40s, the UCC serves as a modern-day version focusing on building necessary skills for working in natural resources.

The program is dedicated to serving the country, community, and state's public lands and local landscapes says Sean Damitz, executive director of the USU Center for Community Engagement. And those goals are achieved in a variety of different ways.

"We have a mission to develop the conservation leaders of tomorrow," Damitz says. "That encompasses everything from working with different nonprofits throughout the state, supporting environmental education, all the way to a lot of crew-based work with natural resource land managers doing stuff like trail maintenance, habitat restoration, fuel reduction, sentencing — you name it."

To accomplish this mission, the UCC relies on teams of AmeriCorps members who spend time working on conservation projects throughout the state. These crews spend their days on a variety of different projects, often in remote areas of wilderness. The work can range from trail maintenance in the Ashley National Forest to collaborative work near Preston, Idaho, with the Northwestern Band of the Shoshone Nation.

For the past six years, crews have helped remove invasive Russian Olive trees and work to restore native plants as part of the Wuda Ogwa Cultural and Land Restoration Project. Damitz says this project brings a lot of pride, not only because of what it means to the community, but also how members of the UCC team have handled themselves.

"I'm really proud of our staff and our AmeriCorps members because they've been at the forefront of developing the relationship and making sure we sustain it," Damitz explains.

While the crews leave a lasting impact on the lands and communities they are working in, alumni of the program say their time with the UCC has also left a lasting impact on their lives and careers.

"It was an amazing experience, one that I frequently look back on and reflect on," Cracroft says. "It's a great opportunity to go do something challenging physically, emotionally, and mentally."

The UCC offers the opportunity for members to challenge themselves while serving their communities. Opportunities that have been helpful in crew members' lives and careers long after their term of service is over.

Kody Kitchener, who currently serves as the program's Northern Regional Coordinator, says his time in the program and the management skills he learned there have been especially helpful in relating with current crew members.



JP Jensen (left) and Van Latimer (right), both AmeriCorps crew members, get their U.S. Forest Service National Sawyer Certification during the Utah Conservation Corps chainsaw training on Aug. 31. A modern-day version of the Civilian Conservation Corps, the UCC spends time clearing trails, battling invasive species, and working on various other projects throughout the year. ***Photo by Ezra Robertson.***

"It's super hard, but this is what we do. You just let them know you've also been through it. I think the people management has definitely helped the most," Kitchener says.

And much like the program its modeled after, a surplus of natural resources experience isn't necessary to get involved.

"Something that we have strived for has been the development of folks from all walks of life," emphasizes UCC assistant director Jake Deslauriers. "That kind of melting pot of different aptitudes and different people has led to the member experience. The job skills required are really not that much. It comes down to an ability to challenge yourself and to adapt."

Kitchener's experience is proof of that philosophy. He wasn't originally planning on pursuing a career in natural resources, but he gave the UCC a shot and that has ultimately led him to his role as the UCC's Northern Regional Coordinator.

"I just think it's a really great opportunity for people to push themselves and kind of get out of that comfort zone and realize that they can do really hard things," he exhorts. "I encourage everyone, even if they don't want to do natural resources for the long term, to give it a shot and see what they're made of." **A**



The Afterburn

USU researchers are predicting the hazards wildfires leave in their wake

By Taylor Emerson '18

A wildfire is a dazzling spectacle of dread and destruction.

As it dances through a landscape, it moves and bends with the wind, sometimes created from the depths of its own consumption. Its yellow-orange light has tantalized and traumatized generations of humans and animals alike — stretching back eons to Earth's creation.

The smoke and ash produced from the flames darkens and reddens the sun, sometimes for hundreds of miles, signaling that somewhere the world is alight.

Left in the wake of this brightness and heat is a place darkened and muted. And like its creator, it is itself now a manufacturer of mayhem.

Burn scars, as the name suggests, are the semi-permanent remains of a landscape torched by wildfires — charred trees, burned-over bushes, and soil that's been baked by temperatures reaching thousands of degrees Fahrenheit.

As a result, "the soil becomes very hydrophobic," says Belize Lane, a watershed hydrologist with the Utah Water Research Laboratory.

This means where once water would have been absorbed into the ground, it tends to rush and run off this new landscape — like asphalt. Instead of soaking into the soil or otherwise being slowed by the trees and vegetation vying for that nourishment, the water swells and picks up speed as it moves downslope, sweeping into it all the debris left behind by the fire.

"The soil essentially acts like its paved over," Lane says. "Water is just going to run right over the surface."

When this water reaches a stream or river, or creates its own where there is none, it leads to intense flooding events — damaging homes, roads, and other critical infrastructure.

Utah is no stranger to this, as just this summer several megafires have burned within mere miles of cities and towns. Beaver, Fillmore, Kanosh, Meadow and Henefer have all seen flames tear through the mountains and hillsides above them and faced the resulting flooding risks.

"Oftentimes the effects of a wildfire can last for anywhere from one to up to six years after a fire," Lane says.

To help mitigate these impacts, Lane, along with her cohort of researchers, is developing models to help predict and plan for downstream impacts to communities and ecosystems as a result of burn scars.

They do this by getting out, boots-on-the-ground, in recently extinguished burn scars — like the Cottonwood Fire, which they visited in August. The team takes measurements on soil infiltration, or how easily water is absorbed into the ground, to note how severe the wildfire has burned the area. They also compare the streamflow and sediment response to storms before and after the fire.

They take this real-world data and compile it into their models, with the aim of predicting how intense the flooding and sediment hazards could be in response to a range of plausible storm events. They are also developing approaches to predict post-fire hazards before a fire even occurs, given how rapidly fires and floods can ensue.

"We know we're facing this increasingly fire-prone future," Lane says. "Can we come in with some projections of what burn severity could look like if a fire occurred… to help inform community and infrastructure design and planning based on where and how large we expect post-fire hazards to be."

These models can then be rapidly revised with observed burn severities after an event occurs to support emergency management and recovery.

"So even if we don't know the actual answer, we can start to plan and design for this future we're actively moving into," Lane says.

Prevention planning could involve measures such as resizing stormwater culverts to account for larger runoff, designing or redesigning roadways away from potential mudslide or rockfall dangers, and accounting for sudden increases in sediment deposits in reservoirs or near dams.

But the models can also support rapid mitigation efforts post fire, by aiding communities, state and federal agencies in identifying the most at-risk areas. This means that these agencies and experts can then direct soil stabilization and debris clearing efforts toward high-priority sites first, working preemptively to prevent severe damage downslope and downstream.

"Our models can help with all of that," says Lane, in regard to helping communities plan for or prevent burn scar-related issues.

Currently the researchers are working collaboratively with numerous state agencies across the western United States, training them how to use and implement the models into their own work. Through this process, they are also soliciting feedback from these users to help improve the models for future use.

"We're hoping as we move forward [we can] continue to get more feedback and continue to improve our predictive capabilities in terms of post-fire flooding and debris flow and sedimentation risk — so that these tools can get better and better," Lane explains. A



Take a look at how USU researchers are modeling burn scars to predict potential flood behavior.

USU associate professor Belize Lane from the Utah Water Research Lab (bottom) collects samples, along with graduate student Megan Casey, from the Cottonwood Fire burn scar. ***Photo courtesy of Belize Lane.***

How Nature Is Helping Utah Reconnect and Heal

By Julene Reese '85 · Photos by Levi Sim

Helping justice-involved youth was not a focus Lewis Kogan envisioned when he became the executive director of utah state university's swaner preserve and ecocenter. Yet less than a year after arriving in Summit County, he helped launch an outdoor recreation and mentorship program for at-risk teens in partnership with Utah's Division of Juvenile Justice and Youth Services.

Early in his tenure, Kogan conducted an informal community needs assessment and found that youth mental health, wellbeing, and substance abuse were among Summit County residents' top concerns. A USU Extension needs assessment confirmed that these issues were growing statewide.

Kogan and other Swaner staff attended a community-building workshop through the University of Utah's University Neighborhood Partners program. Staff from the JJYS were in attendance, and Kogan learned about their work to keep Utah's most vulnerable kids out of the legal and criminal justice system through prevention and diversion programs. The discussion revealed a natural connection.

"We know that youth wellbeing and mental health are top concerns for Utahns, and here we have an agency serving adolescents who are most at risk," he explains. "It felt like a natural fit. Swaner operates through USU Extension, and our 4-H program provides a proven model for helping young people build life skills. We were well positioned to support nature-based experiences for these youth."

So, when the JJYS staff approached Kogan about adding nature connection to their division's prevention programs, he was all in.

"Nature Centers have traditionally focused on teaching people to understand and care for the environment, for the environment's sake," he says. "Yet spending time in nature also provides tangible, positive benefits for mental and physical health."

The Swaner and JJYS teams came up with a plan to launch a pilot program the following summer where Swaner — a 1,200-acre nature preserve known for its wetlands, wildlife, and environmental education programs — would create and facilitate outdoor nature-based activities for the youth.

"I decided to call it the Wellbeing and Ecological Belonging, or WEB, Program," Kogan recounts. "I felt that helping these kids develop a sense of belonging in both the natural world and their communities would help them thrive."

With summer quickly approaching, the Swaner team hired a part-time bilingual program coordinator and scrambled to pull together around 20 activities and locations a month before the start date.

Kogan says his team focused on activity sites that would be familiar and accessible to participants, particularly in the urban core of the Salt Lake Valley. But they also wanted to include non-urban sites that would introduce participants to scenic, wild places such as Antelope Island and Timpanogos Cave, as well as to more adventurous activities such as rock climbing and rappelling.

"We went out on a limb a little," Kogan says. "But we wanted to get it right for these kids and give them the best chance for success."

According to JJYS staff, youth ages 10–17 are referred to their prevention and diversion programs by a police or sheriff's department, school guidance counselor, community organization, parent or guardian, or juvenile court. They said there has been a growing statewide focus on addressing root causes of juvenile criminality and investing in prevention programs rather than detention facilities.

Youth participating in the WEB Program relied on JJYS for transportation to each activity twice a week. An early challenge arose because most participants lacked adequate gear, such as backpacks, water bottles, or sunscreen. Food insecurity was also common, as many teens arrived without having eaten breakfast and with no food to pack for lunch or a snack.



Meagan Ricks, the special programs coordinator for wellbeing and ecological belonging at the Swaner EcoCenter, is one of many WEB program members who works with the Utah Division of Juvenile Justice and Youth Services to help at-risk teens. ***Photo by Levi Sim.***

Coincidentally, Kogan says around that same time, a private family foundation reached out to him and expressed interest in supporting the Swaner EcoCenter.

"We told them about the WEB program, and they graciously came back with a two-year funding commitment that made it possible for us to provide for the kids' needs," Kogan says. "We are so grateful to them. It made a world of difference for participants to have the necessary supplies and food, and it was wonderful to watch them as the 10-week summer program progressed."

Kogan says program leaders saw immediate positive changes as the youth cheered each other on at the top of the rappel route, learned to cook over a campfire, and tackled the steep trail to Timpanogos Cave together.

"They experienced risks and challenges and developed a sense of group cohesion and belonging that they'd never known," he remembers. "We saw them becoming kids again — going from being emotionally shut down to behaving like kids their age should, making friends, goofing off, and enjoying the activities."

Swaner and JJYS staff hope that through the program, youth will improve their ability to manage stress, navigate difficult situations, and strengthen their hope for the future. They also hope the program sparks interest in nature and the outdoors, replaces negative behaviors with healthy pastimes, inspires future careers, and fosters a sense of belonging.

Kogan said that pre- and post-program surveys showed increases in nature connectedness, self-efficacy, and wellbeing among participants, reinforcing what staff observed firsthand as youth gained confidence and formed meaningful connections.

Lehai Makoni, a plan manager with Utah's Department of Health and Human Services, worked directly with the youth participants and saw some remarkable transformations. He recalls one teen who struggled to manage anger outbursts. Makoni was working on intake paperwork with him, and the boy tore up the packet and threw it on the ground. The boy did the same with another plan manager. But after his participation in the program, his mother reported that he is learning to communicate his emotions in healthier ways and even spends time outdoors photographing trees and rivers.

Another memorable moment for Makoni came during an ice skating activity at the Olympic Oval in Kearns, when two youth from rival gangs spent time together. They ended up talking, then helping each other learn to skate, and they left, unexpectedly, as friends.

The program's early success has attracted additional support. In March, Kogan's team secured a $25,000 Nature and Human Health-Utah Pilot Grant from the University of Utah's Parks, Recreation, and Tourism Department. The funding is helping support a formal study of outcomes, continue an after-school program through the school year, and develop a practitioner handbook to support similar collaborations. Kogan says they hope to expand the program to additional counties along the Wasatch Front and Back in the future.

What began as a small pilot program between a nature center and a juvenile justice office is becoming a laboratory for understanding how time outdoors can change lives. Kogan says the partnership has been one of the most meaningful experiences of his career.

"These kids are having genuinely positive opportunities that give them hope," he exclaims. "These are profound moments we've had the privilege to witness. On paper, these kids may be 'justice-involved,' but in real life, they are young people learning to grow from adversity. These kids are our future, and they deserve our attention and support." **A**

Measuring THE Climb

AN OUTDOOR PHYSIOLOGY LAB AT THE LOGAN CANYON WIND CAVE TRAIL

By Alicia Richmond · Photos by Levi Sim



Whether shaking off the holds of winter in spring, escaping the summer heat, or enjoying the fabulous fall foliage, exploring Utah's outdoor beauty is a popular pastime.

And almost as popular as the incredible hiking trails and breathtaking outdoor views, is tracking and chronicling those excursions. After all, did it even happen in the year 2026 if data wasn't gathered or it can't be shared socially?

But how accurate are those energy expenditure prediction equations used by various devices and fitness apps?

This is the question Utah State University graduate student Merrill Ward — with the help of Kinesiology and Health Science professor Dale Wagner — decided to explore for his master's capstone research project.

"I had this idea to go out and do research that involved measuring energy usage and whatnot," says Ward, who recently graduated with a master's degree in exercise science. "The KHS department happens to have a K5 portable metabolic oxygen monitoring system, so it seemed like a perfect opportunity."

Currently, there are several oxygen prediction equations that can estimate energy expenditure or oxygen consumption while walking on a treadmill at various speeds and grades. However, Ward knew these equations might not be as accurate as actually measuring a person's rates as they hike on a moderate trail while wearing a daypack.

The K5 portable gas analysis system Ward used allows a research participant to wear a specifically designed face mask that measures respiratory and metabolic responses in actual hiking conditions, rather than being restricted on a treadmill. The system measures the gases a person breathes in and out and tracks oxygen consumption, carbon dioxide production, respiratory exchange ratio, and overall energy expenditure.

"Merrill's goal was to see how accurate these equations are when applied to real-life hiking, varying grades, self-selected walking speeds, and carrying a daypack," Wagner explains. "To evaluate the accuracy of the prediction equations, he asked avid hikers to wear the mask while walking up and down the Logan Canyon Wind Cave Trail."

In essence, Ward and Wagner moved their exercise physiology lab outdoors — choosing the Wind Cave Trail because of the four-mile round-trip distance, the elevation of more than 5,000 feet, and its variable grade that climbs 1,000 feet over nearly two miles.

The study consisted of 15 participants — 10 male and 5 female — who had their oxygen consumption measured by the portable metabolic unit while hiking both up and down the Wind Caves trail.

"Overall, the equations predicted reasonably well on the uphill section of the trail, but they did not perform as well on the downhill section," Ward shared.

The data collected from Ward's research study can be used to help measure the calories expended when a person exercises on varying terrains and over different distances. Overall, Wagner was impressed with Ward's innovative approach.

Merrill was independent on this research project," Wagner says. "He analyzed different variables, not just uphill and downhill, and he looked at different sections of the Wind Caves — like a slightly easier grade and the steeper grades. I was just thinking of the entire uphill and downhill; I never even considered separating the trail into various segments by gradient. This was all his idea."

If a person is going on a hike and wears a smartwatch with an app that measure calories burned, the data collection from Ward's study can be used to assist with these equations and help improve accuracy levels.

"I typically work with master's students on research projects. It's a valuable tool for them to learn how to submit a proposal and conduct pilot testing and data collection," Wagner says. "Merrill now knows how to use a K5 machine for portable gas analysis, which is a useful skill to add on a resume in our field — especially in a competitive job market."

As an R1 institution Utah State offers significant opportunities for students to participate in research projects — something many seek out as part of their experiential learning experience.

"This research project was a huge opportunity for me," exclaims Ward, who is now a doctoral student in the Emma Eccles Jones College of Education, Health, and Human Sciences. "It was very rewarding to work with an expert in my field. I was excited to approach Dr. Wagner to be my mentor for my capstone project. I have learned a lot that I would not have learned otherwise." **A**



TOP: Graduate student Merrill Ward (left) monitors fellow graduate student Daniel Porter (right) as Porter completes a hike on the Wind Cave Trail. BOTTOM: Porter wearing the K5 portable metabolic oxygen monitoring system Ward used to conduct his research.

Dam Fine Engineering

AGGIE ENGINEER DUSTIN MORTENSEN IS BUILDING A MASSIVE NEW RESERVOIR IN NORTH TEXAS

By Timothy R. Olsen '09, '18 MBA · Photos by Joe Shipman



Dustin Mortensen, a lead engineer for Freese and Nichols, worked with the Utah Water Research Laboratory when designing the Leon Hurse Dam to create and test a unique spillway.

In the spring of 1997, the heavens opened and severe flooding rocked south-central Texas. More than a dozen counties were designated Federal disaster areas and millions of dollars of damage were inflicted.

After the flooding, an investigation into the stability of the Wirtz Dam in Horseshoe Bay, Texas, roughly 55 miles northwest of Austin, revealed a massive hole below the spillway, which had opened all 10 of its gates for the first time during the event.

With long-term forecasts indicating the potential for greater flooding the following year, this was a serious concern.

Enter the Utah Water Research Laboratory.

Contacted by consulting engineers from the firm Freese and Nichols, the UWRL built a 1:35-scale model of the dam in their Logan facility. Using the model, they were able to show how concrete pads placed at the base of the spillway could deflect the flow, shifting the energy dissipation downstream and protecting the bedrock.

"Responsible design says let's minimize risk or uncertainty as much as we can," says Civil and Environmental Engineering professor Blake Tullis, a 1990 USU graduate who worked on the Wirtz Dam project. "That often involves doing a physical model in a facility like ours, and there's not too many of us in the country."

This modeling, combined with additional testing done to create an alternate gate operating sequence, resulted in millions in potential savings. A fact that was even celebrated by a headline in the November 10, 1997, issue of the Austin American-Statesman.

That same fall, Dustin Mortensen was just beginning his educational journey at USU. Born in Delta and raised mostly in Richfield before moving to Pleasant Grove in high school, Mortensen first visited Utah State as a participant in the university's Engineering State program. After that visit, he knew he was going to be an Aggie.

"I spent the week at USU in one of the towers, did all sorts of engineering activities, made good friends, and experienced Logan and USU," Mortensen recalls. "After that week I decided that's where I was going to go."

Mortensen says he'd always kind of leaned towards civil engineering, but that once he was on campus, three individuals — professor Michael Johnson, associate professor Steven Barfuss, and Tullis — really influenced his focus on dam engineering.

Johnson, who was teaching an intermediate fluid mechanics class at the time, says school came easy for Mortensen. He remembers a story recounted to him from some of Mortensen's classmates about how they'd scribble notes frantically during the class and often leave confused, whereas Mortensen would simply sit and pay attention and seemingly master the concepts.

"Dustin is a fellow who is quick to observe what's going on in a process, and I think is fairly methodical with what he says and what he does. He is very sharp at processing the situation and then acting in real time in terms of what's needed," Johnson says. "There are some people who are very aware of what's going on. They see more than just themselves, and I think that's Dustin. He's good that way."

For Mortensen, who graduated with his bachelor's in 2003, the initial plan wasn't to stick around for a master's. However, the combination of USU's unique engineering program — which has a one-year add-on master's track — and an offer from Johnson to design and build a physical model of a spillway structure were too much to turn down.







That project also involved Freese and Nichols, the same engineering firm the UWRL had worked with in 1997, and the company Mortensen now works for.

"I've got a guy here who's pretty good, you ought to consider hiring him," Johnson recalls telling his contacts at the firm. "[Mortensen] interviewed and I reached out to my friend after the interview and he said he didn't interview very well. I said, 'Really? Well hire him anyway. You won't be disappointed.'

"I got a call back in about three months and they said, 'Do you have any more like him?'"

Now, nearly 30 years since Utah State was brought in to consult on the Wirtz Dam, Mortensen is wrapping up construction on a new dam in North Texas. One that just began filling in July and will provide much-needed water for an area of major expected growth.

The roughly 2.3-mile-long Leon Hurse Dam — part of the Lake Ralph Hall project — includes a unique spillway that was tested in the Utah Water Research Laboratory. According to Tullis, this project was the first to combine a labyrinth weir design with a stepped spillway chute.

A labyrinth weir is a type of low dam with a zig-zag shape across the top which helps control how fast the water flows. The longer edge created by the sawblade-like shape, as opposed to a straight line, helps keep the water behind the dam from rising too high and flooding the banks during heavy rain. It also allows for water control with no moving parts, using only gravity and the unique shape.

As for a stepped spillway it's exactly what it sounds like … steps that the water spills over. This helps dissipate the water's energy as it tumbles down over the dam before reaching the bottom — in this case a fair distance.

"It was a little bit unique to have the crest of the spillway be a labyrinth with a steep stepped chute, and transitioning the water from that complicated crest into the step chute was a little bit unique," says Civil and Environmental Engineering associate professor Brian Crookston who worked on the project. "We added some features that really helped with that transition."

For Mortensen, the project meant a relocation in 2021 for he and his wife, Melissa — a 2003 psychology graduate — and their four sons. While it was a change to leave Austin, the place they'd called home since 2004, it was an opportunity to shape the future and create lasting impact.

"It's really neat to be involved with a project like this that changes the map," Mortensen explains. "When you look at a map and a new lake this size shows up, that's something. "It's going to be here a lot longer than any of us will. Lakes last a long time. … It's just neat to be involved with something so much bigger than me." **A**

Dustin Mortensen knew he wanted to be an Aggie after attending Engineering State at the Logan Campus while in high school. He went on to earn both a bachelor's and master's from USU.



Off Road & On Target

USU EASTERN EXPANDS OPPORTUNITY WITH ARCHERY AND MOUNTAIN BIKING

By Mary Hart and Jeff Hunter '96 · Photos by Levi Sim

In eastern Utah, the landscape doesn't just sit quietly in the background. It invites participation.

Shale cliffs and sandstone ridges stretch toward the horizon. Winding desert trails carve through sagebrush and sandstone. And for generations, residents have leaned into the rhythm of the outdoors, where archery and mountain biking aren't just hobbies, but part of the culture itself.

So, when Utah State University Eastern introduced mountain biking and archery as new programs prior to the 2025-26 academic year, it wasn't a departure from tradition, it was a natural next step.

These programs belong in Price, and their inaugural coaches, Cheyanne Slaughter and Mark Jespersen, are doing their best to make sure they thrive there, as well.

ACCURATE EAGLES

Cheyanne Slaughter — one of Carbon County's most accomplished archers — completed an associate degree at USU Eastern in 2025 without having the opportunity to compete on the collegiate level.

"Very, very badly," Slaughter responds when asked if she wishes the Eagles had an archery program prior to the fall of 2025. "And not only because I can offer athletic scholarships that would have helped out financially, but I would have that extra opportunity to be a part of the team and further my shooting career."

Although she's only 21 years old, Slaughter, who was crowned a national champion as a junior in high school after notching a surreal score of 296 out of 300, has been coaching and mentoring other archers since was competing for Carbon High. Currently the head coach at both of her alma maters, Slaughter has seven student-athletes on this year's roster — a few more than the Eagles had at the end of last season — including returnees Kaden Bowler and Ellanore McDonald.

Slaughter, who does most of her recruiting via email and by attending competitions around the country, says it's becoming more well known that USU Eastern has an archery team, and that this year's squad includes three archers from out of state.

"It was most definitely a learning experience," Slaughter says of the archery team's inaugural season. "There were some good parts and some bad parts. One thing about building a team from the ground up and being the only collegiate team in the state of Utah, is that there's not really anyone to piggyback off of.

"But my experience and background in archery definitely helps, and I think things are going pretty good. We learned a lot last year — both as athletes and me as the coach — and we're really growing as a team."

ALONG FOR THE RIDES

Long before he took over the challenge of getting USU Eastern's other new program off the ground last fall, Mark Jespersen was already helping to build miles of singletrack courses and the culture of mountain biking in and around the unique topography of Price. So, it made the veteran rider the best choice to be tasked with developing the Eagle's co-ed team.

The owner of the local shop Altitude Cycle, Jespersen got his first taste of coaching when he founded the Carbon Composite Mountain Bike Team in 2016 — a squad that has grown from three riders to more than 50 competitors over the past decade.

"With the explosion of the NICA (National Interscholastic Cycling Association) among Utah's teenagers, it only makes sense for our universities to create an extension of competitive cycling," Jespersen says. "Utah State Eastern is leading the universities in the state with the only varsity-level program. Through the program, student-athletes are learning life skills, gaining an education, and continuing to progress in cycling."







USU Eastern has the first and only fully-sanctioned, varsity-level intercollegiate mountain biking and archery programs operating under an athletic department umbrella in the state of Utah.

Training on a NICA-approved course right on the USU Eastern campus — a course that Jespersen helped develop a few years ago — the Eagles competed at five events in Utah and Colorado last fall and have a similar schedule this season. The program, comprised of 12 student-athletes — including returnees Boyd Bradford, Greyson Halverson, James Lewis, Tyler Smith, and Bridger Whitaker — hosted the Carbon Crankdown this September in Price. **A**

IN MEMORIAM // *Through Sept. 1, 2026*

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1930s
Don Davis '39, Dec. 25, FL

1940s
Robert E. Corey '42, Jan. 2, OR
Afton B. Farrow (Bunderson) '48, Jun. 10, ID
Eldene Petrovich (Veigel) '48, Jun. 6, UT
Charliene T. Reed (Tweedie) '49, Apr. 28, UT

1950s
Robert T. Anderson, Jr. '57, Jun. 24, CA
Gloria Bagley (Randall) '57, Jun. 19, UT
Stanley S. Beus '57, '58MS, Jun. 24, AZ
Philip H. Brewster, Jr. '50, Jul. 8, GA
Ruth C. Carlson '54, Jul. 22, CO
Donald G. Cummings '53, May 18, NV
Joellen P. Dillard (Pingree) '56, Jul. 2, UT
Carolyn Ruth Downey Flint (Downey) '53, '80MS, Jun. 10, ID
Richard O. Ellis '54, Jun. 4, UT
Dave G. Finch '54, Feb. 25, UT
Margaret Ann Ford (Preston) '58, Jan. 28, OR
Keith S. Hansen '59, May 14, UT
Blair H. Harrison '57, Mar. 22, UT
Hal I. Himes '57, Apr. 23, UT
Stanley L. Johnson '56, May 19, UT
Grant S. Kent '57, Apr. 15, ID
Mahlon L. Lantz '52, Apr. 15, NY
Arden W. Lauritzen '57, Apr. 25, UT
Laree R. Lee '56, Jul. 30, UT
Janet Manwaring (Bateman) '57, Apr. 14, UT
Vola C. Meyer '53, Jul. 13, UT
Lt Col Richard E. Michaud '50, Apr. 18, AZ
Dorothy A. Nelson (Moore) '55, Apr. 11, MI
Gary L. Nelson '59, Apr. 1, FL
Vera Bingham O'Brien (Bingham) '50, May 11, UT
Anne Epps Page '56, May 6, UT
Boyd W. Parker '58, May 8, UT
Cary G. Peterson '57, Apr. 10, UT
Wendell L. Pope '56, '68MS, May 10, UT
Mae A. Roberts (Strand) '55, Apr. 22, UT
Thomas J. Rocchio '59, May 2, NY
Delores Shupe (Anderson) '59, Apr. 22, UT
Pete Sparreboom, Jr. '55, Jun. 4, UT
Vauna Vee Taylor (Gray) '58, May 3, UT
W. Ray Thornley '56, Apr. 24, UT
Devere M. Watkins '59, Apr. 21, UT
David N. Welch '59, Jul. 13, UT
Robert M. Williamson '58, Jun. 1, GA
Ken Gene Woodward '56, May 16, UT
LaMar Wright '56, '64MS, Jul. 5, UT

1960s
Delbert G. Alder '65, Jun. 22, ID
Charles Kent Ashbaker '61, Jul. 31, OR
Nolan E. Ashman '65MS, May 17, UT
Lyle J. Barnes '69MS, May 25, UT
Melvin H. Barrus '63, Apr. 15, ID
Michael A. Beard '63, Mar. 20, UT
Gordon Daniels Brown '64, Apr. 2, UT
Melvin R. Brown '61, Jul. 17, UT
Carol Buckner (Anderson) '62, Mar. 19, UT
Robert L. Burnham '67, Apr. 21, ID
Kent H. Butikofer '66, '67MS, May 25, ID
Linda Lee Call (DIVES) '63, Aug. 19, UT
Neldon L. Casper '67, '74MED, May 24, ID
Boyd Chugg '64, Jun. 21, ID
William C. Cliff '65, Apr. 23, WA
Melvin A. Coburn '60, '72MS, Jun. 25, UT
Rich D. Connerley '69, Jul. 25, UT
Leland A. Cottle '61, Apr. 18, UT
Norm Dean Daines '66, Apr. 27, WY
Boyd D. Datwyler '60, Apr. 30, UT
Jill Dunn (Bateman) '63, '65MS, Apr. 23, UT
Sharell Baird Eames (Baird) '64, May 8, UT
Jay Ronald Eastley '66, Jun. 15, UT
Roxie Fackrell (Throckmorton) '66, May 6, UT
Norris L. Fullmer '65, Apr. 17, VT
William S. Greaves '66, Nov. 17, UT
Brooksby E. Hafen '65MED, Apr. 24, NV
Antoinette Hall (Duce) '64, May 8, UT
Dee Poppleton Hall '66, May 22, UT
Shirley J. Hampton (Stephenson) '67, Jun. 12, ID
Brent M. Hansen '68, Apr. 28, UT
James E. Hansen '67, Jun. 18, UT
Paul W. Hardman '69, Jun. 27, UT
Karma J. Hills (Sonne) '68, Jun. 27, WA
Donald E. Howell '60, May 11, UT
Glenna Huff (Hanson) '69, '83MS, Jul. 29, UT
Sidney K. Hullinger '62, Jul. 25, UT
Patricia G. Ingoldsby (Berger) '62, Apr. 4, UT
Diane S. Jensen (Skinner) '66, Apr. 1, UT
Max A. Jensen '69, Apr. 8, UT
Cheryl Johnson (Geddes) '65, Jul. 11, UT
Lee Johnson '67, '71MFA, May 2, WY
Marilyn Beth Johnson (Barrus) '66, '88MED, May 24, UT
Reed E. Jorgensen '61, May 8, UT
Chuck Kleinhenz '68, Jun. 28, IN
Joseph E. Kuta '66MS, Apr. 27, ID
Gordon J. Larsen '62, May 22, AZ
Laurel D. Larsen '64, Jul. 23, UT
Robert D. Lewis '62, '63MA, Jun. 5, UT
Marilyn Joy Marriott '62, Jul. 21, UT
Barbara S. Mathis (Bullock) '66, Jun. 28, UT
Howard Boyd McIntosh '67, '73MS, Jun. 14, UT
Catherine Dale Montgomery (Brown) '63, '90MED, Jul. 27, UT
Phyllis Moore '67MA, Oct. 5, NE
Stephen S. Morgan '65, Jun. 26, UT
Marcia Murdock (Crawford) '60, May 3, UT
RoyAnne Newbold (Tygesen) '60, Jun. 2, CA
Leon K. Odendahl '61, Jun. 8, CO
Ted Olsen '60, Jul. 20, UT
Clarence P. Peterson '60, '62MS, Apr. 10, UT
Dan Fletcher Poppleton '64, Jun. 27, ID
Jaren S. Pugmire '68, Apr. 27, ID
Loretta H. Ricks (Hales) '61, Jun. 23, CA
Wayne A. Rowley '60, '62MS, Jul. 3, IA
Doris Peterson Rusch '65, Apr. 10, AZ
Bill Sakaguchi '62, Jul. 6, WA
Wayne Schow '60, '61MS, Jun. 4, ID
Jan B. Shipps (Barnett) '61, Apr. 14, MI
Edwin E. Sibley, Jr. '64, Mar. 3, AZ
Harold S. Stock '61, Jun. 2, UT
Grant A. Theurer '68, May 28, UT
Lothair W. Thompson '68, Jul. 9, UT
Kathleen M. Tureson (Fergusson) '66, Jun. 15, UT
Vicki A. Walker (Hatch) '66, Jul. 15, VA
Ronald J. Watkins '63, May 26, UT
Allyn Wilkinson '65, Apr. 7, CA

1970s
Colonel DelReed Bergeson '72, Apr. 6, ID
Alan Lloyd Bird '72, Jun. 5, UT
Dennis C. Bosworth '72, Apr. 8, ID
Rebecca Elaine Bradford '78, Apr. 1, CA
Carlyle B. Burton '71, Apr. 5, UT
John M. Cady '77, Jul. 25, IN
James D. Cass '73, Apr. 29, MT
Darlene Ann Cologna (Davis) '75, Apr. 13, UT
Douglas K. Cranney '72, Jul. 3, ID
David Lewis Culver '70, Mar. 19, OR
De Ann Humphrey De Lange '72, May 9, ID
DeAnn Forbes '72, Jul. 24, UT
Gary Goodwin '71, '72MS, Jun. 8, ID
Debra Jean Harker '76, May 15, MT
Linda L. Harker '74MBA, Apr. 30, UT
Richard R. Hawkes '71, May 18, ID
Gordon H. Hirano '75, Mar. 14, HI
Grant Wendell Homer '70, May 20, UT
Charlene H. Hyde '75, Jul. 1, WY
Sherman E. Jensen '77, '80MS, Mar. 8, UT
Stephen G. Jolley '76, Apr. 6, UT
George S. Kalarites '77MED, Jun. 13, MA
Toby Ann Lamoreaux '76, Jun. 5, WY
Robert Lin Lowe '75, Jun. 26, UT
Thomas D. Macroy '79PHD, Mar. 28, IL
Robert P. Miller III '79, Jul. 1, CA
David W. Mills '72, '77MS, Apr. 28, UT
Dennis G. Monson '77, Jul. 4, UT
Susan Noble Pease '70, '72MS, May 3, UT
Evelyn C. Powell (Cornwall) '72MED, Jun. 9, NY
Paul Pulver '78, '81MS, Jun. 27, UT
F. Greg Robinson '71, Apr. 11, UT
Shelley Ann Rubrecht '76, Apr. 14, WY
Kathryn L. Sessions '70, May 25, WY
Jeffrey S. Stevenson '75, May 17, KS
Burnell Thorley '79, May 21, ID
Wanda Lee Valentine '76, Apr. 11, MO
Lynda C. Varner (Critchlow) '72, Apr. 30, UT
Anthony Winterer '70, Jul. 9, UT
Kenneth D. Worthington '77MED, May 2, ID
Richard A. Yamasaki '73, May 13, ID
Janet Lee Young '73MS, '77PHD, Jul. 12, UT

1980s
Darell S. Bagley '86, Jul. 25, TX
Russell Bair '87, Jul. 17, UT
Kay Baker '83, Jun. 4, UT
Timothy P. Battey '89MS, Dec. 3, HI
Bruce C. Bennett '82, '86MFA, Sept. 3, WY
David Q. Cornwell '82, Apr. 2, NC
Michelle H. Diantonio '89, May 16, UT
Donald R. Frohlich III '83MS, '89PHD, Apr. 29, TX
Val Smith Goodfellow '82, Jul. 30, UT
David A. Green '83, May 6, UT
John William Halpop '85, '89MS, Apr. 4, MT
Kathy Jensen Hensley '88, May 4, UT
Michael David Holmquist '80, Apr. 21, NE
Michael M. Homer '81EDS, Jun. 7, UT
Marci S. Hunsaker (Stowell) '82, '85, Jul. 20, CA
Linda Lee Hyatt '81MED, Sept. 15, KS
Clair N. Oursler '85, Jul. 10, NH
Bruce D. Parker '87MS, '89PHD, Mar. 19, UT
Lynette Spackman '80, Jun. 29, UT
James P. Tucker '86, May 28, ID
Leland G. Yates '89MED, Jun. 19, UT

1990s
Shane N. Alder '97, Nov. 19, ID
Wendy A. Anderson '90, May 20, UT
Gary L. Burnett '95MBA, Apr. 30, NC
Robert Dana '65, '91MS, Apr. 11, WY
Larry D. Dennett '96, Jul. 7, UT
Brent C. Esplin '94, '00MS, Jul. 24, MT
Evelyn H. Falk '91MED, Jul. 15, UT
Teri A. Karren '97, '99MS, May 11, UT
Mike Lindhardt '93, '97MSS, Apr. 8, UT
John H. Marshall '93, Apr. 19, UT
Kathy Matthews '95, Jul. 31, UT
David Tim Miller '98, Jun. 4, UT
Elizabeth W. Montague '91MA, Apr. 22, UT
Rebecca Ann Newlon (Maxfield) '99, May 1, UT
Steve Perry '94, Apr. 28, UT
Barbara J. Piantanida '92MS, Oct. 20, OR
Marjean Willie Pitkin '95, Apr. 8, UT
Douglas K. Reiter '93, '99MS, Jan. 2, UT
Tracye A. Rollins '92, Jun. 17, IL
Chris A. Schuller '93, Apr. 3, UT
Linda Stowell (Andrus) '91, Jul. 31, UT
Eric Andrew Swenson '91MS, Jan. 6, WA
Richard Kent Whitaker '92, Apr. 18, UT

2000s
Lavar J. Bair '00, Apr. 11, UT
Leon Basdekas '07PHD, Jun. 21, ID
Marilyn Blakeley (Briem) '08MED, Jun. 17, UT
Emily Archibald Burke '00, Mar. 26, ID
Jack Fleming '02, Dec. 5, ID
Donald H. Fluckiger '08MBA, Apr. 27, AZ
Boyd J. Fowles '04, Apr. 8, UT
Adam J. Gibbons '09, May 8, UT
Logan R. Mckenna '07, Jun. 1, UT
Janet C. Nelson '06MS, May 13, UT
Colby E. Olsen '09, Apr. 2, NV
Dana K. Ricketts '00MED, Jul. 3, UT
Kandice A. Searle '04, '17, '20MSW, Jun. 2, UT
Payton Scott Sharp '08, '09MBA, Mar. 26, UT
Cammie Thomas '08, Apr. 19, UT
David H. Wharton '07, Jul. 18, UT
Melissa M. Wilson (Miller) '05, Jun. 1, WI

2010s
Alisha M. Eversole (Mills) '11, Mar. 30, UT
Christopher John Poulsen '11MS, '12MBA, Apr. 16, UT
Theresa Lee Vosper '16, Jun. 28, CA

2020s
Cannon E. Burton '24, Apr. 15, UT
Nikkita Hope Cooke '22, '22, Jun. 18, UT

ATTENDERS
Connie N. Allred Jun. 30
Matthew Archuleta Apr. 13
Andrew J. Arellano Jul. 16, UT
Ethan Atkinson Jun. 1, CO
Gary Lynn Barker Jun. 22, UT
Sharon Mills Bayles Apr. 13
Taygen Earl Belew Jul. 25, UT
Lynnette M. Bennett Apr. 5, UT
Judy A. Bergan Jun. 21, UT
Robert Blankenagel Apr. 26, OR
Michael D. Boyd Jun. 27, TX

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Glenn B. Brady Jul. 25, UT
Elsie Marie Bringhurst Mar. 28
Ray Broadbent Apr. 18, WY
Taylor Mark Brown May 14, UT
John Butorovich Jan. 8, MT
Roger Dean Campbell Jun. 26
Carole E. Cannon May 9, UT
Miranda Gae Capinpin Jul. 3
Ronald L. Carpenter Apr. 28, OK

Beverly G. Cassidy (Griffith) Aug. 15, PA
Colleen M. Cave Jul. 17, UT
James Lee Chapman Apr. 29
Nanette J. Coonrod Jul. 10, UT
Robert E Davis Jul. 11
William H. Dellos Jun. 23, UT
Mike L. Duran Jul. 9, UT
Karren Greaves Erickson Jul. 7
Dianna Lynn Espinoza Jun. 14
Mary A. Farley Jun. 20, CO
Ted Farmer Apr. 25, UT
Stanley R. Fellows May 27, ID
James A. Finley, Jr. Jun. 3, MA
Michael J. Foster May 2, UT
Merlyn Fowler Apr. 16
Deanna Frank (Clayton) Jul. 13, UT
Louis Seth Frank Apr. 27, UT
Mary Lynn Fuller Mar. 27
Maria Dll Garcia May 13, UT
Leo Geddes Apr. 28, ID
Rex Gerratt Apr. 15, ID
Terry M. Gleave May 20, UT
Owen L. Gonder Jun. 5, UT
Dorothy Kirk Guinand Apr. 23
Kenneth Dean Haden Jul. 12
Max Hadfield Jun. 3, UT
Alice Hall Feb. 5, UT
David Andersen Hall May 3
Bradley Jay Hammel Mar. 9, UT
Lee Ned Hancock Jul. 26
Patricia Hartle Jun. 19, UT
Isola Beth Haslem Apr. 2
Alton N. Hassell Jun. 21, UT
Elana Hatalie Jun. 1, UT
Jimmy V. Henrie May 21, UT

Carole Nilson Hodges Jun. 21
Katherine Holdaway May 26
Carol Holt May 15, UT
Charles L. Hoyt May 20, UT
J. Robert Hunsaker Jun. 12
Kirk D. Iverson Apr. 3, ID
Roma H. Jenkins (Hailstone) Jun. 21, UT
Roger Calvin Jensen Jun. 15
Barbara Nelson Jeppsen Apr. 8
Charles Edwin Johnson Apr. 20
G. Elmae Johnson Sept. 2, NV
Charles E. Jordan Jun. 27, DE
Terry L. Jordan May 14, CO
Gay L. Jorgensen Jun. 25, UT
Lynn Jorgensen Jun. 12, UT
David Kent Jul. 9, UT
Betty F. Kloepher (Fazzio) Apr. 8, UT
David Kuresa May 11, UT
Blair Lancaster May 22, UT
Coyla L. Larson Jul. 19, UT
Kammie Sue Lee Jun. 21, UT
Ruth B. Lehenbauer (Benson) Apr. 1, UT
Lynette H. Lessar (Holdway) Jun. 27, UT
Blaine H. Liechty Apr. 8, UT
George D. Lindimore Jul. 30, OH
Boyd Lindsey May 3, UT
Gilberto Madrid Jun. 28, UT
Isaac J. Manzanares Apr. 15, CO
Stanley Marvidakis May 26, UT
Richard Maryboy May 11, UT
Shannon B. Maughan May 28, UT
Dan C. McKay Jul. 13
Harry L. Medford, Jr. Jul. 2, UT
Rick L. Meinders Apr. 17, ID
Bonnie J. Melo May 4, UT
William Yates Mercer May 20
Richard Harlan Meservey Mar. 22
Sally J. Middleton Jul. 4, UT
Eldon L. Miller Jul. 13, UT
Don Stephen Milligan Jun. 1
Gary A. Mitcheson Apr. 30, UT
Joan S. Moss Jun. 9, UT

Gary Motte Jul. 7, UT
Hyrum D. Mower Jul. 30, UT
Gunther Muhler May 23, CA
Jared P. Nelson May 26, OR
Norah Nelson May 30, UT
Vernen J. Nelson Jul. 10
Christa Ruth Nielsen (Krisch) Apr. 27, UT
Maridon S. Nielson (Smith) May 28, UT
Michael ODonnell May 14
Jimmy Jack Olson Jul. 5, UT
Larry Otteson Apr. 21, UT
Robert Overson Jul. 26
Wayne W. Painter Jul. 21, UT
Thomas Lynn Park Jun. 27, UT
Melissa Phillips Apr. 12
Betty May Pitts Apr. 10
Tom Platis Jul. 8, UT
Isaac Leon PoVey Jul. 5
Kelsey Prestwich Jun. 13, ID
Dale C. Price Mar. 30, UT
William J. Price May 7, UT
Barbara Jeanne Quigley Jul. 1
Norma J. Rampton (Scherer) Apr. 9, CA
Tanner Ray Jul. 11, UT
David V. Rea Jun. 9, UT
Gary Rea Jul. 11, UT
Clark Riches May 12, UT
Helen Robbins May 23, UT
Leo Paul Robinson Mar. 29, UT
Richard T. Roche Jun. 12, UT
Peggy Rose Apr. 16
DeeAnn W. Rudd (Wood) Jul. 10, UT
Larry Wayne Sharp Apr. 27
Allan R. Shelton Jun. 7, UT
Deanna Layne Simmons Jun. 15, UT
Douglas H. Smith Jul. 23, CA
Helen Smith Jul. 30, UT
LeGrand Sorensen Jun. 12, UT
Robert Bruce Spratt Jul. 25, UT
Jack H. Stevens May 1, UT
Cathy Louise Stringham May 12
Martin Hodgkinson Strong May 8, UT
Nathan C. Tanner Apr. 24, UT

Larry Taylor Jul. 28, UT
Malcolm Taylor Jul. 3, AZ
Mary Lou Taylor Mar. 14, NC
Terry L. Taylor Jun. 11, UT
Cynthia Howell Thalman Apr. 18, UT
William Louis Thornton Sept. 16, PA
Mary J. Trimble May 30, UT
James L. Tweddell Apr. 16, UT
Charles Twitchell Apr. 5
Michael Dennis Vail Jul. 8
Carol R. Valberg (Reeder) May 18, UT
Carol Lofthouse Van Orden Jun. 3
Frederick Vigil Jul. 10
Raymond C. Voegele Aug. 8, ND
Lynn A. Walker Jul. 5, UT
Dean Walton Jun. 17, UT
Elaine Wamsley Jul. 21
Boyd J. Wathen Jul. 12
Carole M. Williams Apr. 10, UT
Paula M. Wilson May 4, UT
Alayne Winegar Jun. 15, UT
Torma Esplin Winegar May 26
Katherine Wood May 24, UT

EDUCATORS

John C. Allen Apr 1 OR
Martha Archuleta Jul 23 UT
Robert Barclay May 23 UT
Ryan S. Blau May 26 UT
Nola Ann Carling May 8 UT
Gary Connors Jul 26 UT
Donald H. Cooley May 6 UT
Garth M. Eldredge May 26 UT
Mary A. Farley Jun 20 CO
Ruth B. Lehenbauer Apr 1 CA
Barbara S. Mathis Jun 28 UT
Richard E. Michaud Apr 18 AZ
Peggy Nixon Apr 12 UT
Eugene W. Schupp Jun 1 UT
Lynette Spackman Jun 1 UT
Gail D. Warr Jun 14 UT
Angela Tingey Weeks May 19 ID



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Cheryl Riniker

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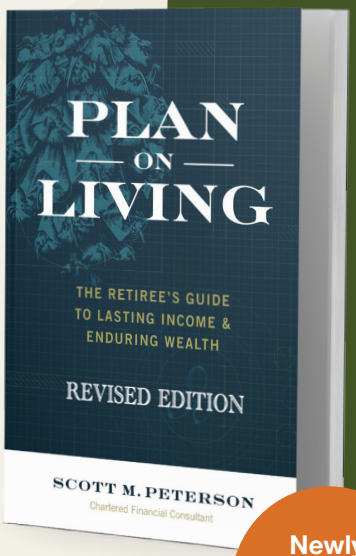
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