Getting a natural workout at Mount Sinai

ANDREW
CLARK
A SLICE OF LIFE

Mount Sinai, Egypt, 240 miles from Cairo, is in the southern portion of the Sinai Peninsula, which is the land bridge between Asia and Africa.

The mountain is in a desolate area in the southern interior of the peninsula and is composed of large, rough, jagged boulders. At its base is the isolated fourth century Monastery of Saint Catherine, a UNESCO World Heritage Site.

Mount Sinai, at 7,500 feet, is unique in that it plays an important role in each of the Jewish, Christian and Islamic faiths. It is thought to be where Moses brought down the stone tablets inscribed with the Ten Commandments.

I was working in Cairo and my wife, Barbara, came to celebrate our 40th wedding anniversary in Upper Egypt where we could visit the Valley of the Kings, Valley of the Queens and the wondrous temples of Abu Simbel, Karnak, Luxor. Egypt has many astonishing structures from far, far back into antiquity designed and constructed in unimaginable ways.

For example, the Great Pyramid of Khufu, also known as Cheops, is estimated to be built of about 2.4 million blocks and weighs a total of 6,648,000 tons. All of that rock had to be carefully quarried.

The limestone blocks came from nearby, but the granite and others were carried to the Nile River several hundred miles upstream near Aswan, floated to the Giza landing site, off-loaded and carried to the site of construction of the pyramid. There still is argument about how actual construction was accomplished. You can go inside the largest and the middle-sized pyramids, and if you go to Egypt don't miss doing it. Inside the middle pyramid (Pyramid of Khafre) you pass through small tunnels deep into the center, and there you end up in a beautifully polished marble room with a large granite sarcophagus where the coffin of the mummy was placed. I remember sitting on the edge of that sarcophagus in that sacred, peaceful place of total silence, thinking, "There are millions of tons of rock above my head, put there as many as 5,000 years ago, and it is utterly solid and secure."

Back to Mount Sinai, we had been snorkeling over in the Gulf of Aqaba on the eastern side of the Sinai Peninsula, and we learned about the opportunity to climb Mound Sinai. We signed up and were driven late at night to begin the hike in the dark at 2 a.m. A guide led us up and up a long trail.

Part way up, Barbara, who loves camels, got a chance to ride one to where the camel trail ends. There, 750 irregular, roughly carved steps in the rocks lead up to the summit. We arrived at the top just as the stars were giving way to daylight.

The sunrise shed light on several hundred people from all around the world, perched on the rocks and boulders, quietly worshiping in various ways. Once the sun was up, we began our descent to escape the intense heat that would soon overtake the peak. At the bottom of the 750 steps we learned there was a shortcut of 3,000 more rocky steps back down to Saint Catherine's. I opted to take that route, while Barbara decided to ride another camel the 2-mile trail down the mountain. She soon found that riding downhill on a camel saddle gives your pelvis a severe beating.

She ended up walking most of the way, while I was focused on avoiding a nasty fall on those 3,000 irregular stone steps often called "God's Stairmaster." At the end, my legs felt like spaghetti.

Climbing Mount Sinai is the sort of activity you do once. And I must say, if Moses carried two heavy stone tablets down that mountain he was one ferociously fit dude. And then, when he saw that golden calf that his people had decided to worship, he was so angry that he broke the tablets — and a bit later had to do the whole climb-up-and-carry down another set of them again. What a man.

One up-and-down was sufficient for me.

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Dr. Andrew Clark is a livestock veterinarian with both domestic and international work experience who lives in Pendleton.

How Oregon can create a more clean and reliable electric grid

LISA **COHN** ELISA **WOOD**
OTHER VIEWS

More and more utility customers are embracing the "prosumer" revolution, purchasing and bringing solar, energy storage, wind and other clean energy resources onto the electric grid.

Such action becomes important as severe weather puts pressure on our power supply. For example, a year ago, more than 400,000 Oregon residents lost power during a winter storm.

In some areas, Oregon utilities are beginning to pay for prosumers' resources, technologies that can help green the grid and even avert power emergencies. But utilities need to do more.

Both Portland General Electric and PacifiCorp offer their customers incentives for purchasing solar or solar plus storage. Hopefully, this will create more prosumers who install and take advantage of clean energy.

PGE now is offering a Smart Battery Pilot under which it pays customers with energy storage — Tesla Powerwalls, for example — up to $40 a month for the ability to manage the batteries to support PGE's system when needed.

Utilities need to offer more programs such as PGE's battery pilot under which prosumers are paid to lend their clean energy resources to the grid. This would be especially helpful in Central Oregon, which is blessed with plenty of sunshine that can be converted to solar energy.

Oregon could look to California, where San Diego Gas & Electric and the Marine Corps Air Station Miramar inked a deal under that Miramar would provide the utility with generation from its clean energy microgrid (consisting of solar and storage) during September and October 2021. The goal was to help avert electricity emergencies due to hot weather.

When prosumers feed electricity to the grid from their clean energy sources — or use their home resources to separate from the grid and reduce demand when utility resources are strained — they're helping avoid blackouts. They're ensuring utilities, businesses and households don't fire up polluting fossil fuel generators.

With programs such as PGE's Smart Battery Pilot and, in California, the agreement between SDG&E and Miramar, utilities have the opportunity to help keep the grid from becoming overtaxed.

Prosumers who share their clean resources with the grid also can help utilities manage their "peak" or highest demand periods without requiring utilities to invest in building "peaker" plants, which are often based on fossil fuels.

Energy storage batteries and electric vehicle batteries often are sitting unused in houses or businesses. Oregon utilities need to take advantage of these and other resources and help move the transition to clean energy forward.

To achieve this goal, we need national and state policies that alter archaic rules and regulations. These policies were created before technology advancements began giving businesses and consumers more control over their energy supply. Many of these rules and regulations involve utility requirements, rate structures and territorial restrictions.

California policymakers are working on enacting some measures that benefit prosumers. For example, California Senate Bill 379 calls for shortening local governments' approval process for firing up homeowners' solar and storage systems. This type of policy would be helpful in Oregon.

Also helpful would be measures requiring utilities to approve the interconnection of clean energy projects to utility systems within a specific time frame. Too often, homeowners and clean energy project developers must wait months for interconnection.

Prosumers can help ensure the grid is clean, flexible and reliable, especially with the aid of new policies. This becomes more and more important as extreme weather poses threats to the reliability of the grid.

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Lisa Cohn and Elisa Wood are editors of Microgrid Knowledge, a news site that focuses on distributed energy and microgrids, www.MicrogridKnowledge.com.

The faces of February

ALEX
HOBBS
PASTURES OF PLENTY

My sons are walking along a path that winds through old Douglas firs and dawn redwoods. A cloudless Willamette Valley sky is suddenly swallowed by a canopy of green. The floor is spongy. Twigs crackle and snap, and we are at once surrounded by rich, loamy, petrichor-laden earth. The dirt winds through bare-branched rhododendron up towards Moreland Hall — the English department. I start to recite the opening monologue from "Richard III."

"Now is the winter of our discontent," I sneer and give chase to the boys who have broken into a sprint. Their little footfalls make dull thuds against the pavement, but I have hunched myself like Shakespeare's antagonist and cannot catch them before they make it to the foot of the steps at the building's entrance. The shaded breeze is cool, and the boys begin to climb over bike racks and fire hydrants. I ask my older son the contents of the next line, and he knows. "Richard III" is his favorite.

"Made glorious summer by this sun of York," he says. He is hanging upside down on a bike rack splattered with a patina of paint and steel. I tell the boys a story of Robert Schwarz, my old Shakespeare professor, who made us stand up and recite monologues.

"He was the first professor to ever embarrass me in front of an entire class," I tell them. I join in bike rack gymnastics.

"What happened?" My younger son asks, hopping down the stoop. His skinny legs seem scarcely big enough to hold him up, and I am reminded of cartoon fox Robin Hood masquerading as a stork.

"I was reciting to the class and I didn't know how to pronounce the word 'indicted.'" An English language Puck, a trickster word.

"How is it spelled?" My older son asks. He is now watching a wheeled-robot glide down the sidewalk.

"In-dick-ted," I say. I emphasize the hard 'K' sound. "But the 'C' is silent when you pronounce it." I can remember the heat as it took root in my cheeks that day and the annoyance on professor Schwarz's face as that word stumbled from my mouth.

"Well, don't feel bad," he says in between upside down and right side up. "That's a stupid word." He says this with such nonchalance, such self-assuredness. I think of him in that orange chair in the room with condensation on the windows, in place of me, and understand that whatever I am doing, I am doing something right.

Beavers and streams

A few weeks ago I tucked myself into bed and cozied up to an hour and a half long seminar on beavers and their role in riparian ecosystems. As one does.

Our collective definition of a stream might entail swift-moving water, steep-banked sides, white bubbles steadily flowing downstream. What is really happening, however, is a cycle of degradation and erosion. Scar tissue left behind by the absence of beavers. Incised streams mean a reduced water table, reduced vegetation, reduced sediment, reduced beaver food — a cycle that will continue in perpetuity without restoration efforts.

In the weeks following the viewing, I still am thinking of the dichotomy of the incised stream versus the meandering gentleness of a healthy one. With our post-settler goggles, we see a stream's intended state as stagnant and sluggish. It is easy to see why we mistakenly equate these fast, unnatural streams as better. The water is getting from point A to point B faster, without hindrance. After all, this seems to be our collective attitude in general: fitter, faster, stronger more productive.

The lure of falling into the swifter stream is so strong, and wading through the murky waters of a beaver meadow seems so unpleasant. We are tempted to make rash decisions predicated upon the eradication of something more beautiful and more natural. Entrusting the wandering over the linear takes time.

So we go to sleep, and in the morning, we'll plant willow and hope Castor canadensis returns.

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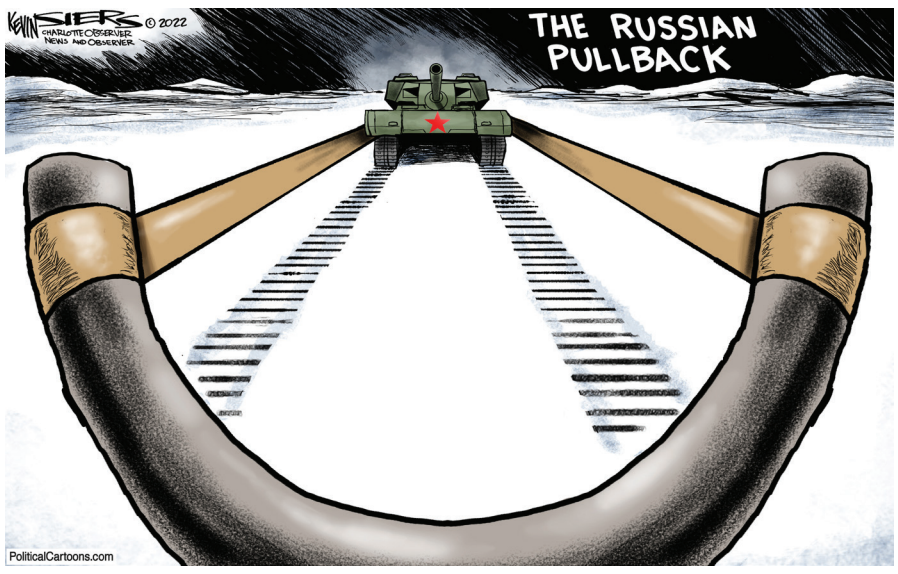
Alex Hobbs is a former educator turned full-time homeschooling mom. She has a degree in political science from Oregon State University.



Tuition transparency makes higher education more inclusive and accessible

WILLIAM
MULLEN
OTHER VIEWS

If we truly want to make higher education more equitable and accessible, then colleges and universities need to change how they think about affordability and the actual price of a college degree.

Too many institutions hide the true cost of attendance behind a high sticker price that is then offset with deep discounts thanks to financial aid and merit awards. The outdated high-cost, high-discount approach, combined with rising tuition prices year after year, has widened the gap between what families think they'll pay and what they ultimately do pay for college.

It prompts some college-bound students to steer clear of schools — particularly private institutions — where they would thrive. Low-income students might think those institutions are out of their reach because it is not immediately clear how much financial aid is available to them to help set off the steep cost. As tuition gets more expensive, it becomes less feasible for middle- and upper-middle-class students to afford higher education because they qualify for less financial aid.

But prospective students and their families shouldn't overlook private colleges and universities simply based on the sticker price, which tends to be higher than their public counterparts. A private college education is more affordable than you think, especially because some institutions, including Willamette University, are making intentional decisions to be more transparent about their tuition and making education at their institution more affordable for all.

Willamette University recently reset its tuition and made the landmark decision to lower its undergraduate tuition by about 20% this academic year. And following a record fundraising year, Willamette is offering $12 million to new students in 2022, up $1.5 million from last year, directly serving our goal of making a Willamette education affordable for all.

Students and their families deserve a straightforward approach to tuition rates and financial aid, and we hope more elite institutions make similar changes. In the meantime, it's important that students don't overlook private colleges and universities because they think they're out of reach financially.

Get in touch with the financial aid office at the institution you are considering. This process seems complicated and daunting, and it can be overwhelming. Most institutions have teams of people who are willing to help. At Willamette, our staff has helped thousands of students fill out their applications, understand financial aid and access the resources they need to make the process easier.

The confusing tuition and financial aid policies at many intuitions can lead to "sticker shock," sometimes prompting families to simply give up on the prospect of a private university. We think it serves students and families better to make costs and financial aid more transparent. We have already taken steps towards this goal at Willamette. And we hope other colleges will also follow our example.

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William Mullen is the vice president for enrollment management at Willamette University.