

BY JACOB STEINBERG

hen the lingering snow from northern Minnesota's long winter finally recedes, David Abazs's idyllic homestead in the woods becomes a never-ending to-do list.

There's manure to pile and compost to spread. Seedlings must be transplanted from trays to pots before eventually making their way into the ground. Everything is on a schedule, and right now, that means "everywhere is digging," according to Abazs. His days are filled with work, but at least the mosquitos aren't out yet.

By summer's end, his toil will produce an abundance rarely found in northern Minnesota. His soil teems with the ingredients for thriving crops—nitrogen, phosphorus, potassium—to such a degree Abazs claims his soil is three times more productive than southern Minnesota farms'. Unlike the farms of the state's breadbasket, which typically grow a lot of just one thing. Abazs's acreage yields a bounty fit for Suessian description: fields aflow with collard greens, pea pods, peppers, parsnips, beans, broccoli, and romaine; a pumpkin patch and an apple tree.

This abundance would've been impossible three decades ago, when Abazs, 53, and his wife, Lise, settled land that was long abandoned and partially reclaimed by surrounding woods. In its natural state, the soil here rejects most attempts to tame it. "Nothing grew," he says. "We wanted to renew an older homestead and take what was fallow and make it grow."

While he and Lise worked odd jobs, like taconite plant janitor, to make ends meet, Abazs spent years nurturing his soil with techniques modern agriculture has all but forgotten. He gets his water from the ground and energy from the sun. The farm's name, Round River, is derived from the work of the naturalist Aldo Leopold, and describes a self-sustaining system where nature provides everything, and nothing goes to waste.

"The name is to remind us," he says. "How can we live a good life with minimal resources, so that everyone can live on the planet?"

The ethos of sustainability extends beyond Abazs's property line. It has come to define the tiny community of Finland, Minnesota, a township nestled between the ridges of the Sawtooth Mountains, where the east and west branches of the Baptism River converge. Home to around 450 people, Finland presents a blip of vitality in a region struggling to square an identity forged long ago with the economic realities of today.

Abazs chose to resettle in Finland because it was near Lise's family, in southern Minnesota, and had a climate similar to Maine, where Abazs had planned to live. He found his "ocean" in Lake Superior and chose his

## The Miracle of FINLAND

Does this tiny Iron Range gem hold secrets of small-town survival?













TOP LEFT, MIDDLE RIGHT AND BOTTOM LEFT BY EMILY UTNE. THE REST COURTESY OF DAVID ABAZ



EMILY UTNE

plot in Finland on a map without ever having visited. Today, Abazs is chair of the town board—effectively the mayor, if townships had mayors, and if that title in Finland didn't already belong to a regal-looking little dog everyone calls "Mayor Joe."

Over his 31 years there, Abazs has been instrumental in bringing Finland together, in the hopes it could become a model for local agriculture and sustainability. It's a daunting task, especially in a region largely considered hopelessly infertile for crops, traditionally dominated by the resource-extraction industries of mining and lumber.

He calls it his "big experiment."

innish immigrants began coming to northern Minnesota in the late 19th century, following a path of least resistance from one cold and boggy woodland to another. At the time, Finland was part of the Russian Empire. Many Finnish emigres fleeing tsarist Russia were socialists, who challenged the dire working conditions they found in the mines and lumber camps of the day.

The Finns earned a reputation as rabblerousers. After strikes were broken in 1907 and 1916, mining companies blacklisted the Finns, and lumber companies soon followed. Finnish immigrants took up homesteading in the margins of the Iron Range, subsisting on oats and potatoes.

Finland gradually came into existence as as settlement, though it wasn't named until the railroad station was painted, according to local lore. Painters asked a passerby what the name of the town was. "Finland!" she yelled back, and that was the name they painted on the station.

A co-op general store opened in 1913. Moose meat was first come, first served. The site remains the community's main store, and touts itself as the state's longest continually operating co-op.

Committed Marxism gradually receded, but "having a communal mindset was kind of the only way to survive up here," says Lise and David Abazs built Round River to run entirely on solar and wind power.

Honor Schauland, whose home was once a community hall. Eventually, farming in Finland gradually receded too. Where once there were over a hundred farms, today there are just over a dozen. Twice as many town residents work at the nearby Northshore Mining Plant in Silver Bay, and double that amount work in forestry.

Abazs is convinced he can bring farming back. New technology and improved techniques make it possible to grow a cornucopia of produce in fields that once could only support potatoes, barley, and oats.

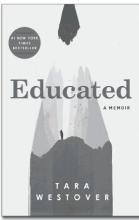
In 1987, Abazs convened in the Twin Cities with about a dozen farmers still reeling from the farm crisis of the mid-'80s. Oil prices and farm debt ballooned, grain exports nosedived, and thousands of farms went out of business. They listened as three farmers from Massachusetts described a new food system taking root in the northeast. It was called community-supported agriculture (CSA for short), and offered an alternative to the commodity-driven food economy that tethered farmers to the capriciousness of global trade.

In a community-supported model, consumers buy a stake in the farm, sharing the risk in exchange for a portion of that season's yield. There are now over 7,000 CSAs inthe country, according to the United States Department of Agriculture, but there were none in Minnesota at the time. Abazs wanted to start one, but had his work cut out for him. He stood and explained his circumstances.

Farming in northeast Minnesota can be downright punishing. The glaciers left behind a landscape hostile to most crops. The soil is acidic and infertile. The growing season is short, and frost can happen almost any time of year. Worse, there was no infrastructure in place to processor distribute food—everything would have to be built from the ground up. No one else on

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"Do you think it's possible?" he asked the visiting farmers.

One said: "If you can do it in Finland, you can do it anywhere."

oday, Abazs' CSA provides kale, kohlrabi, cabbage, and much more to people from Two Harbors to Grand Marais. Years of work went into making Round River farm possible.

Abazs ran pigs through the brush to clear the shrubs and fertilize the dirt, a technique most farmers would think of as something their great-grandpa did. He planted cover crops, like oats, to shoot their roots into the ground, die, and replenish the earth. The soil grew richer: and

began to tolerate more demanding crops, but it took five years to foster reliable soil. Still, Abazs faced another challenge: His farm sits two feet above bedrock.

"Imagine farming above a parking lot," he says. "When I go to southern Minnesota I drool. It's incredible. I'll tell people I've got 22 inches and they say, "That's pretty good topsoil," and I say no, that's soil to bedrock."

However, what Abazs lacks insoil volume he more than makes up for in fertility. His organic remedy of cover crops, compost, and crop rotation has cultivated soil bursting with life. Good soil has 5 percent organic matter. Abazs's soil has up to 18 percent.

Says Abazs: "Conventional farmers treat the soil like a medium. You put the chemicals in, you put the nutrients in and let the plants suck it up. The soil is dead. It's not biologically alive."

Conventional farming practices also make soil vulnerable to erosion. One-third of the world's topsoil has already been lost, according to the United Nations' Food and Agriculture Organization. Organic practices like those used by Abazs are becoming more common as farmers realize the rate of soil degradation can't be sustained, but they're a requirement in Finland

"The regenerative farming stuff that's all exciting now, it's basically the only way you can farm up here," says Finland farmer Kaare Melby. "You have to build soil. Things grow really well up here once you get your soil right."

Melby grew up in town, but left to become an archaeologist. He returned in 2012 because he didn't like the transient nature of the field and wanted to settle where he had roots. He lives in the woods with his family and his "sugar bush," a network of tree-connected piping that harvests sap from the forest. Melby runs the town's social media accounts. He sings praise of







**EMILY UTN** 

the local happenings on the community blog, Welcome to Finland—intentionally stylized as "WTF."

Finland residents are used to lots of snow, and spend the winter months sitting in the sauna and curling to their hearts' content.

In March, the community celebrates St. Urho's Day, a holiday conjured by the Finns in northern Minnesota who were jealous of the Irish getting the day offfor St. Patrick's Day. They invented their own patron saint, and picked March 16, so they could get to the beer a day before the Irish. The modern St. Urho's Day celebration still has the beer. At some point, a drag beauty pageant was added to the festivities. A chainsaw-carved totem of St. Urho can be found in Finland's town triangle. "We're too small to have a square," Abazs says.

Today, many children come to Finland for the township's premier attraction, Wolf

Sustainability was enshrined in Finland's 2005 comprehensive plan, which says the township "will emphasize alternative energy sources for areas that are off the grid and will be a model of energy efficiency for sparsely populated rural areas."

Completed in 2011, the Clair Nelson Community Center is powered by a solar array and heated by geothermal energy underneath a nearby swamp.

Winters are long and cloudy, but solar panels abound in Finland. In March, the Minnesota Department of Commerce recognized Finland for its mission to become the "solar capital of the continental United States"—a distinction that will soon adorn the town's sign. According to an audit conducted by Abazs, at 282 watts, Finland has more solar capacity per capita than Las Vegas and Phoenix combined.

Left: Honor Schauland with her daughter at the community center, which runs on geothermal and solar power. Right: Stefan Meyer in the deep-winter greenhouse at the AgroEcology Center.

Abazs. "In the last year, we've doubled our solar [output]."

tefan Meyer was growing vegetables above a parking lot, though unlike Abazs, his was a literal one. Meyer was living in the Seward neighborhood of Minneapolis when a local nonprofit asked him to run a CSA above a vacant lot awaiting redevelopment. "I'm pretty good at taking on impossible project startups," he says.

Meyer, 44, is a fifth-generation farmer, and those are just the ones he can account for. He grew up on a conventional farm, but practices an older method. "My father laughs," he says, "because he says I farm like my grandfather used to farm."

After five years of urban farming, Meyer's organic credentials landed him at his next project startup: running AgroEcology Center, a farming research station in Finland.

An experimental deep-winter greenhouse captures the low-hanging northern sun's heat, and stores it in a cavity of porous rocks below. When it's negative-10 below, the greenhouse maintains a balmy 100 degrees.

But the center's real mission is permaculture, a budding design philosophy in which the farmer observes and bends to the natural world's rhythms.

"It's a whole new type of farming," Abazs says. "A new farming system."

Picture a field on an incline. Along the gradient, the field is punctuated by shallow trenches that retain rainwater. Between them sit mounds of soil, which protect the hill from eroding. The resulting wavy field

## Finland has more solar capacity per capita than anywhere else in the continental United States.

Ridge Environmental Learning Center which sits on a ridge overlooking Lake Superior—passingthe town's solar-powered fire station along the way. Wolf Ridge's lights are also powered by a giant solar array, as are a scattered collection of homes in the valley below.

Lettuce, peppers, and tomatoes grown inside Wolf Ridge's three muggy greenhouses—Blood, Sweat, and Tears—feed the center's visitors. Abazs hopes students and other visitors learn they could grow their own food, too.

"If we can do it in our crappy soil, then they've got no excuse," said Abazs.

Finland's embrace of solar is partly out of necessity. Many homes are without utility hookups. "Some people have little dinky solar panels to charge their phones," Schauland says. "It's a part of our way of life."

Abazs's push for solar wasn't always met with enthusiasm. He once lost reelection as board chairman because, he says, people thought he was "too green." Then gas prices spiked during the Great Recession, and suddenly everyone in Finland was open to alternative energy sources.

"The temperature has to be right. For years, no one was talking about solar," says

design becomes a self-sustaining system, where water naturally pools downward. The variety of conditions created allow for different crops to thrive in the same field: rhubarb and raspberries below, hazelnut and apples overhead. Dragonflies and mayflies dart across the water. Birds roost above.

The allure of permaculture and its principles have drawn a new group of young people to farming.

"There's great interest in it for a whole non-agriculture group of young people," Abazs says. "The environment is a factor. There's a lot of people looking at what's going to make them have a more rich life."

dealism is one thing. A food system that makes money is another. Several obstacles stand in the way of an agrarian renaissance on the Iron Range. "If a regional system is going to have real teeth to it, it's got have all the processes in the production cycle," says David Syring, a professor at the University of Minnesota Duluth who's studied the potential for a regional food system. Syring says the biggest obstacle isn't the soil, but the lack of infrastructure. "There need to be places that farmers can process their products

to get more value out of them."

Farming also carries a costly barrier to entry, and almost never gives way to financial boon. "It captures the imagination of young people who want to go out and grow [food]," Syring says. "Young people are idealistic, but they've got to make a living."

Most can't, under current economic conditions. According to the USDA, only 10 percent of small farmers' income comes from their farm, while 90 percent comes from off-farm sources.

Abazs concedes his farm's example is lofty, if not unattainable, for many. Still, he maintains farming presents a more compelling and fulfilling future for the Iron Range than alternatives like tourism, and he's got the research to back it up. He worked with Syring to determine whether the region—composed of 15 counties in northern Minnesota and Wisconsin—hadthe land to support a local agriculture system, and what the economic benefits would be.

Results were encouraging: The Iron Range has 1.6 million acres of "average or above" land, fit for farming, enough to feed everyone who lives there "without cutting a single tree," Abazs says. "If we did, there would be just under 1 billion dollars staying in our community, instead of being exported out."

Farming could also provide 20,000 new jobs to a region thirsting for work. But for some, the idea of the Iron Range being anything but a mining region is irreverent.

"We have such an investment—a physical investment, and emotional investment in the Iron Range being a mining region," says Svring.

It's not as though many other options

exist. The Iron Range has struggled to diversify its economy. The Iron Range Resources and Rehabilitation Board (IRRRB), a state agency founded in 1941, is tasked with providing loans and grants to help support businesses not tied to mining. Its investments have produced a mixed bag.

"The failures are bigger and more public," says Iron Range blogger and political commentator Aaron Brown, "and the successes are smaller."

The agency trumpets blockbuster projects, like solar panel manufacturer Silicon Energy, which folded last year, and an infamously short-lived chopstick factory in the '80s. They've also been found to throw good money after bad, as an audit unveiled about Giants Ridge Recreation Area in Biwabik, a fledgling ski resort the IRRRB subsidized to the tune of \$17.4 million.

Brown thinks recurring failures have caused many on the Range to wonder if a diverse economy is worth the trouble. "People are tired of watching money go out the door—watching these big things wheel through, then blow up or dissipate," Brown says.

Tourism has emerged as a natural fallback, though not without contention. IRRRB funding has helped dot the region with golf courses, resorts, and bike trails. But tourism is fickle, too. The number of resorts in Minnesota has dropped by half in the last 30 years.

"Twould hate to rely a whole economy on tourism. It's almost as fatal as doing it on a resource like ore," says Abazs. "Gas prices go up and people change their habits. It's also low-paying jobs—not that farming is going to be high, but everybody needs food."

hen Bri Crowley and her partner Gabe were looking for a place they could learn to farm, they kept coming across tales of an agrarian utopia tucked away in the hills of the Iron Range. "We just kept hearing about Finland," she says.

Neither Bri nor Gabe have farming in their bloodline. She grew up in Apple Valley, and studied global studies and social justice in college. That's when her interest in agriculture blossomed, as she learned how humans destroy the environment and exploit each other. She decided to learn how to farm abroad, eventually landing in Turkey, where she met Gabe. Now the two of them live in a cabin on Abazs's land at Round River farm, where they share in the toil—and the bounty.

"We're really interested in farming as a way to be good stewards of the land. The way that David and Lise farm is a way that really resonates with Gabe and I," she says. "Especially the idea that this place can sustain itself."

One day, David and Lise plan to pass Round River on to the young couple. Until then, there are holes to be dug.



