

A full-page photograph of a field of tall, golden-brown grass, likely rye, under a dramatic, cloudy sky. The grass is in the foreground, filling the lower two-thirds of the frame. In the background, a line of dark green trees is visible against the sky. The sky is filled with heavy, grey clouds, suggesting an overcast or stormy day. The overall mood is somber yet hopeful.

# SEEDING A REVIVAL

Adventures in growing and distilling heirloom rye

BY JEFF CIOLETTI



Laura Fields has a bone to pick with folks who repeat an all-too-common refrain in the rye distilling world.

"One of the most irritating comments I hear—it's like nails on the chalkboard for me," says the aptly-named CEO of the small-farm-focused Delaware Valley Fields Foundation, "is that [heritage] grains are heritage grains for a reason. That's something I need to correct."

Heritage/heirloom rye varieties largely disappeared because of a certain Constitutional amendment that was enacted 102 years ago.

"That reason is Prohibition," says Fields, who also organizes the American Whiskey Convention in Philadelphia. "If it weren't for Prohibition all of those heritage grains would still be active. There would not be a commodity market the same way that there is today."

And if Fields has anything to say about it, all of those will be active once again at some point, providing an alternative to the commodity varieties that she likes to call "hamburger grain."

"[Commodity grain] is just a mishmash of different sources, all compiled together into one bulk load. And then [the suppliers] just tractor trailer it over and [say], 'Here, have some grain.' It's the same way we have hamburger [meat] today. We don't know if this is 'Bessie,' it's just a bunch of different cows and we have no idea."

As part of its mission to de-hamburgerize agriculture and revive heritage grains that have been all but lost to history, the Delaware Valley Fields Foundation launched the Seed Spark Project, which seeks to restore Pennsylvania's long-lost grains. Principal among those is Rosen rye, which played a significant role in the Keystone State's whiskey distilling history prior to Prohibition. Historical documentation identifies Rosen as part of the mash bills at the old Michter's Distillery near Schaefferstown, Pennsylvania, for instance. Stoll & Wolfe Distillery in Lititz, Pennsylvania, took a particular interest in it, as the late master distiller Dick Stoll had worked at Michter's before it closed in 1989 and was keen on using grains he had distilled with there.

So, in 2015, the foundation kicked off its project to return Rosen rye to the state's farmers and distillers. It started that fall with just five ounces of Rosen planted in the ground. In subsequent years that quantity increased exponentially and by the July 2019 harvest, Stoll & Wolfe was able to distill with more than 500 pounds of milled Rosen.

By the summer 2020 harvest, the project yielded nearly 6,000 pounds of Rosen. That



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**—Tom Potter on New York Distilling Co.'s yet-to-be-named whiskey made with Horton rye**



fall, 2,650 pounds of Rosen seeds went into more than 20 acres of land.

Mountain Laurel Spirits in Bristol, Pennsylvania—known for Dad's Hat Pennsylvania Rye Whiskey—also has been on the forefront of the Rosen revival. Founder Herman Mihalich has partnered with Delaware Valley University in nearby Doylestown, Pennsylvania, for the past seven years to cultivate the rye variety. Mihalich has been working with Nevada Mease of Riegelsville-based Meadow Brook Farms, which started with a few Rosen seeds and continues to increase its yield—but only enough, thus far, to produce test batches on a small, 5-gallon still. Typically, it takes about 2,000 pounds of rye—approximately one acre's worth—to produce a batch on Dad's Hat's full-scale still. For its existing products, Dad's Hat primarily uses the non-heirloom variety, Prima, among others.

"[Mease] has put a lot [of Rosen] back in the ground for us so that next summer we'll be able to do several full-scale batches," Mihalich reports. "He's got several acres now planted and we're going to take a couple of those and do some big batches and then once again pour as much as we can back into the ground so that more and more gets produced.

... We're looking forward to next year."

Rosen's allure extends beyond Pennsylvania's borders, as some out-of-state distillers have started to work with it as well. Far North Spirits in Hallock Minnesota, currently has some in the ground. "I was able to get a few acres' worth of seed last year," says Far North owner and distiller Mike Swanson, "and so I'll be interested to see what that does this summer. That's the first legit heirloom I've grown."

The appeal of Keystone Rosen Rye—as the Seed Spark Project is branding it—comes down to one simple factor.

"Flavor," says Fields. "I mean, [it's] night and day. ... There are certain markers in these grains that show different flavor profiles in the long run. You have these heavy, bold characteristics."

There's a distinct anise/licorice-like quality that comes through, for instance. "You also get these really heavy fruit and really strong floral notes," she continues. "So, it's very, kind of, perfumy, very fruity and beautiful."

Tasting notes for rye tend to lean on spicy descriptors, but the term doesn't necessarily do the grain justice.

"Don't get me wrong," Fields says, "there is

a spice character there. But it's not pepper. ... The cooking spice is there, but it's a sweeter note. Everything about this grain is sweeter."

### New York State of Rye

Historically, Pennsylvania has—rightly—attracted the lion's share of attention for its place in rye distilling history, but Upstate New York gets to share in that spotlight. The Empire State boasted its own storied pre-Prohibition rye heritage, which inspired the establishment of the Empire Rye standard a handful of years back. Two of the major tenets of that standard state that 75% of the whiskey's mash bill must be New York-grown rye and that the product must be mashed, fermented, distilled, barreled and aged at a single New York State distillery.

A portion of that grain—albeit an admittedly small fraction—is likely to be from heirloom varieties, thanks to the pioneering efforts of some of Empire Rye's founding distillers. New York Distilling Co. in Brooklyn—which, along with Black Button Distilling in Rochester, Coppersea Distilling in New Paltz, Finger Lakes Distilling in Burdett, Kings County Distillery in Brooklyn and Tuthilltown Spirits in Gardiner—launched the Empire Rye



Erik Wolfe and Dick Stoll mashing in with Rosen rye in 2019





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**—Laura Fields of the  
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Clockwise: Rosen rye spikes in the spring; harvesting Rosen in 2020; Rosen grist; Laura Fields; seeding Rosen in the fall.









Mountain Laurel Spirits founders Herman Mihalich and John Cooper

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**—Herman Mihalich of Mountain Laurel Spirits**

initiative—began exploring heritage rye more than a decade ago.

Since that time, Rick Pedersen, a farmer in the state’s Finger Lakes region, has supplied much of New York Distilling’s grain, including an heirloom rye variety.

“[Pedersen] reached out to Cornell [College of] Agriculture [and Life Sciences] and identified three varieties of rye that had been common in New York in the 1800s and sourced them from a seed depository,” recalls New York Distilling co-founder and president Tom Potter. “When you ask for seeds, you get very few. I think they got 10 of each of the three varieties.”

After a couple of years of propagation—beginning on a small tabletop setup at Cornell—it became clear that one of the varieties,

known as Horton, was performing far better than the others. Pedersen then put Horton seeds in the ground at his farm.

“We started with a patch, got up to an acre, then five acres,” Potter continues. “It wasn’t until the fifth or sixth year that we actually had enough to distill any of it, and still have enough to put the seeds back and grow more. ... We’ve been planting 50, 60 acres every year—I think maybe 100 acres last year.”

New York Distilling Co. has been producing whiskey with Horton every year since the first harvest that yielded enough for distillation, but it has yet to release any.

“This has been a 10-year project that we haven’t seen a nickel from yet,” Potter says. “But we’re really excited about the product. The product in the barrel is really interesting,

really good, and it will be an important part of our future.”

That future may be quite soon.

“We’ll start to bring it out in very limited quantities, if all goes well, this October,” Potter reveals. “But we don’t have a name for it yet.”

He’s also reluctant to provide any detailed tasting notes before that time.

“I’m going to be cagey and not describe it quite yet,” Potter says. “It’s our opinion that we’re getting a wonderful intensity of flavor. It was our theory that because the yields were so low, the kind of flavor per kernel could be higher—that [with] whatever’s available in the soil as nutrients to the rye in that acre, you get more nutrients per stalk. I don’t think that’s scientific, but that’s our belief.”





**"If it really didn't make a difference, we wouldn't continue with it. But we could tell right off the still that it was different."**

**—Jay Erisman on New Riff Distilling's whiskey made with Balboa rye**



### Balboa's Back in the Ring

While the public has to wait a little longer before it gets to try New York Distilling's heirloom-rye-based whiskey, fans of New Riff Distilling had that privilege back in the fall of 2019 when the Newport, Kentucky-based producer released a limited batch of its product made from an heirloom variety known as Balboa. Co-founder and distiller Jay Erisman was actually in the market for non-GMO corn when he first encountered the rye. He reached out to Four Roses distilling legend Jim Rutledge for a good farming contact in that space and Rutledge put him in touch with a farmer named Charles Fogg.

"We got hooked up with a wonderful corn farmer and I kept it in the back of my mind to do something with heirloom grains," Erisman says. "The farmer beat us to it. He was delivering a load of grains in 2014, just a couple of months after we had opened ... and he said, 'By the way, did I ever mention that I grow some rye too?'"

Fogg had been growing Balboa as a cover crop for about two decades before Erisman met him.

"You've heard the phrase, 'You make your own luck'—we kind of made our own luck in getting Balboa rye when working with a farmer like Charles Fogg," Erisman notes. "He had never done anything with it, he had just grown it as a cover crop. Some years he plowed it under, other years he harvested it and put it into animal feed, but it had never been sold as a distillate ingredient before."

A quick side note about the name. Balboa may not be the grain's true moniker.

"When I talk to agronomists and rye scientists, they correct me gently and say they talk about Balbo rye," Erisman explains. "We call

it Balboa—we know we're wrong, but that was how it was sold to us. I think what happened linguistically [was that] there was a crossover from a farmer given the word Balbo and thinking of the Italian surname Balboa."

And before you think it was an homage to a certain fictional boxer, the first mispronunciation likely occurred decades before the Italian Stallion's first screen outing. The grain's peak popularity was in the 1930s.

Whatever you call it, the grain expresses itself considerably differently than the varieties that the distillery uses for its core Kentucky Straight Rye Whiskey—whose mash bill is 95% rye and 5% malted rye, from grains supplied by Brooks Grain. (Erisman expresses great pride in the fact that New Riff uses about 20% more rye than corn on an annual basis, "a statistic I am quite certain has never happened before in Kentucky.")

"I don't say [Balboa Rye Whiskey] is better than our standard rye, but it's absolutely different," he offers.

Among those differences are elevated levels of floral and fruit notes, with a bit less intensity in the realm of clove, cinnamon, mace and other baking spices of their ilk. "It's otherwise similar in terms of mouthfeel and body, it still behaves just like a rye," Erisman points out.

The distillery was methodical about determining the grain's long-term prospects within its portfolio.

"It's kind of a two- or three-tiered thing," he says. "If it really didn't make a difference, we wouldn't continue with it. But we could tell right off the still that it was different."

New Riff initially made very little—a single batch, followed by a second batch several



months later. The team waited for some early, albeit immature, results to come out of the barrel. They'd taste it at six months old, one year old, etc. and then compare that with the distillery's standard rye at similar ages. "Even at that point this stuff is really good and it's really distinct from our normal rye," Erisman reports. "That means there's a real basis for going forward with more."

In subsequent years, New Riff ramped up production of Balboa. "We used to take it one batch at a time, which is about 8,000 pounds of rye, and we worked our way up to digesting a silo at a time," he reveals. "So he then began delivering a full tractor load, which is about 50,000 pounds."

### Lodging Costs

Heirloom rye may be attracting more fans in the distilling world, but it's not likely to become more than a fraction of producers' grain supplies any time soon. After all, we're more than a century removed from its pre-Prohibition heyday and there just aren't enough farms making it these days for it to make economic sense versus commodity grains. And many in the agricultural community will continue to rationalize that heritage varieties can be quite difficult to farm.

"When people talk about Rosen, they say, 'Well, it's such a temperamental grain,'" Fields notes. "Yeah, that's okay though. It's supposed to be. It's a grain that's going to respond to terroir and every grain responds to the soil."

She warns that such complaints stem from a commodity market mindset, which is the dominant one in modern farming.

"You're thinking, 'I just want to produce as much of this as humanly possible,'" Fields says. "You start looking at hybrids, you start looking at genetically altered grain because those are going to grow everywhere and they're going to grow in massive quantities. That's such a modern mentality. Before Prohibition, all of the farmers understood that 40 bushel an acre is wonderful, that's a great yield."

Rye also has been modified to the point that its stalks are shorter, ostensibly to improve yield by reducing lodging—the tendency for the stalks to fall over toward the end of the season. The shorter the stalk, the less likely they are to lodge.

"That's why seed companies have put so much money and effort into creating hybrids, so they're shorter and easier to grow," Fields explains. "But the problem is in doing that, they're taking the flavor out—you're trading flavor for manageability. And is that smart?"

And besides, lodging is not all that bad for

the plants. In fact, letting things lie (literally) for a little while may actually help the grain.

Fields points out that in northern U.S. states like Minnesota and Michigan—where most American rye is grown—farmers commonly employ a practice called swathing, where they cut the grain in the field and let it sit for five to seven days to dry out on the ground.

"So I envision that leaving it on and letting it lodge is not as bad as cutting it early and not letting it ripen," she says.

And she doesn't mean ripen the way fruit ripens. Rye is planted in September and by June it's fully grown and starting to die because it's already flowered. Once it pollinates, the seeds begin to ripen.

"So you get these berries and the plant begins to look a bit bulkier on the top and the heads start to fall over—so that's when the berries are ripening," she notes. "What you want to do is let that get really nice and dried out."

The dryness enables storage and milling. Allowing the grain to get to such a low moisture content in the field makes for a riper berry with more flavor packed in it.

"The longer it stays on the stem, the better, in my view, your grain is going to be in the long run," Fields asserts. "Which is why, even when you're dealing with a little bit of lodging, you're still allowing the plant to draw the sugars out of the plant itself and into the berry—and that's good."

### Cultivating Connections

For the producers turning that grain into whiskey, there's a great deal that's good about the whole heirloom rye concept. Dad's Hat's Mihalich says that, for one, it gives distillers the opportunity to partner with local farmers—which he finds tremendously rewarding.

"For me, it's getting to know your local farmers and working with them directly, engaging with them so you can educate each other," Mihalich says.

And that's music to Fields's ears, as part of her mission is to be a conduit between the farmer and the distiller.

"That's what we need, more distillers sticking their hands in the dirt and understanding what it is that's making their whiskey taste the way it does," she muses.

But, above all, experimentation with heirloom rye should remind distillers why they got into this industry in the first place.

"Part of what we're doing here is bringing really high-quality products to market, but, also, let's have some fun," Mihalich says. "If you're not in this business to have fun, you'd better just go home." ■

## Variety Determines Flavor

Not all producers of rye whiskey are going to have the resources or even the desire to work with heirloom grains. The good news for them is that there's an equally vast spectrum of flavor and aroma nuances across many modern, non-heirloom ryes as there is in the more venerable, pre-Prohibition varieties.

Back in 2015, Far North Spirits owner and distiller Mike Swanson teamed up with the Minnesota Department of Agriculture on a multi-year study to evaluate 15 (non-heirloom) rye varieties on their performance in the field and in distillate form.

"The biggest finding was what we set out to either prove or disprove: that the variety of rye affects the flavor of the distillate," says Swanson. "All other things being equal, the variety of the grain matters. That hadn't been proven before. It was one of those things where people were like, 'yeah, that makes sense,' but nobody had gone ahead and proven it with a scientific study."

The research team controlled as many of the variables as they could so that each grain could be evaluated under the exact same conditions as all of the others.

"We found tremendous differences between white distillates coming off the still, each variety being grown in the same ground, milled, mashed, fermented and distilled in the same place, the same methods, the same yeast strain, everything else," Swanson reveals.

Varieties evaluated included Aroostook, Bono, Brasetto, Cossani, Dylan, Forsetti, Hazlet, Musketeer, Oklon, Prima, Progas, Rymin, Spooner, Triticale (technically a wheat-rye hybrid) and Wheeler.

"What we were able to demonstrate was that you really need to rethink the front end of your production process because it matters," Swanson continues. "The variety is actually really important."