

## Business Is Brewing

Krystal Gabert, Editor, Food Manufacturing



It's been a long, strange trip," says Jim Wiesender, general manager and co-owner of Sand Creek Brewing Company in Black River Falls, Wis.

That trip began in 1856 when the Oderbolz Brewing Company opened for business in the very building in which Sand Creek brews its beers today. The Oderbolz family operated the brewery — the first large-scale beer-making operation in western Wisconsin — until a series of family tragedies prompted them to sell the facility in 1911 to a group of businessmen who promptly opened the Badger Brewing Company.

The Badger Brewing Company was doomed, however, as the Eighteenth Amendment and subsequent Volstead Act of 1919 banned the production, sale, and distribution of "intoxicating liquors."

Beginning in the 1920s, the building was used as a poultry processing facility, creamery, two soft drink processors (the Rock Springs beverage manufacturing plant and a small Coca-Cola bottling facility), a manufacturer of land mine parts for the Korean War, and a storage facility.

Then in 1997, the space was restored to its original purpose when the Pioneer Brewing Company began brewing beer in the location once again. In 2003, the company began looking to sell the facility.

Todd Krueger was then the Brewmaster at Pioneer Brewing, and he knew just who to call.

Wiesender was then operating the Sand Creek Brewing Company in Downing, Wis., about 90 miles northwest of Black River Falls. The two men got to know each other

## **Business Is Brewing**

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at various industry events throughout the craft brewing world, which Wiesender likens to a “fraternal organization.”

He says, “When we were trying to build the brewery up in Downing, it was a rather crude operation, being that it was put together on what we thought would work. When we started planning a bigger facility, we needed someone with some expertise. And here was Todd, who knew all about the Pioneer Brewing Company... He obviously had a wealth of knowledge for us, and that’s how we got to know him.”

Wiesender had been cultivating demand for his brews since 1999 but was having difficulty securing the loans necessary for expansion. So when Pioneer went up for sale, Krueger proposed a partnership, and the two took over the space, adopting the Sand Creek Brewing Company name. The deal was signed on March 10, 2004.

### **A Bigger Beer To Brew**

Since then, business is booming. Sand Creek has experienced double-digit expansion each year since making the move to Black River Falls, showing a sales increase of anywhere from 30 to 60 percent. 2011 is projected to be up 30 percent from 2010’s sales. In 2004 the company produced 2,000 barrels, and by 2011 the brewery is on track to reach 10,000 barrels.

The company that began with two workers now employs up to 16 full- and part-time employees, many of whom are local high school and tech school students looking for a little education with their after-school jobs. Some of the positions that require more technical knowledge and responsibilities have been recruited from throughout Wisconsin and the rest of the country. Among its newly-robust staff, the brewery employs four expert brewers in addition to Krueger, who remains the Brewmaster and is a three-time gold-medal-winning champion in the World Beer Cup competitions.

“As we add staff, I’m hoping that we can stop killing ourselves and return to something resembling a normal work week... though I’m not sure what that looks like anymore,” admits Wiesender with a smile. “We’ve sometimes had a near-vertical growth curve, which makes this place pretty interesting to manage.”

Wiesender associates this growth with the overall growth of the craft beer segment. “When I got into the business back in 1999, the craft brewing segment was one-half of one percent of the overall beer market,” he says. “That’s nothing. However, now we’re sitting at four-and-a-half percent of the total beer market.”

### **Point ‘A’ To Point ‘B’**

But getting all this beer to market can be a tricky task. “A typical small craft brewery distributes to about a 100-mile radius. There are 19,000 people in Jackson County... That makes it a little difficult to have a profitable business,” says Wiesender.

Therefore, Sand Creek must cast a wider net in order to reach a large number of consumers. This geographic reality has created a distribution dilemma not faced by

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brewers located in more traditionally metropolitan areas.

The company has grown from its roots as a wholly-self-distributed brewery and now works with about 20 distributors to sell its beer throughout Wisconsin and parts of Minnesota, Illinois, and Iowa.

However, Sand Creek still relies on self distribution for many of its customers in hidden corners of the state.

“Without the ability to wholesale our own product, we could very well be hamstrung,” says Wiesender. “In some of the smaller markets, there will only be a Miller house and a Bud house,” he explains, referring to MillerCoors and Anheuser Busch distributors.

### **A Case By Case Basis**

Despite new distribution hurdles, Sand Creek continues to grow, and the company remains one of the only breweries in Wisconsin that is currently taking on contract clients.

Pioneer Brewing Company was involved in contract brewing before the Sand Creek acquisition, and Wiesender was amenable to the idea of “keeping the tanks full” when the company had excess capacity. The facility now maintains between six and seven clients.

The demand for contract brewers is much higher than Sand Creek can meet. The company gets a steady flow of inquiries about its contract brewing services — about 150 annually. Because of the company’s rapid growth and the heavy demand during spring and summer, the tanks are at capacity, and the company is not able to take on any new clients in its present facility.

Many brewers view contract brewing as an unneeded headache, so the contract business is a small segment of the market with huge demand.

“There’s a lot of two-way trust that goes on here,” says Wiesender.

Sand Creek employees brew all the beer for contract clients, some of whom will travel up to Wisconsin to participate in the process, though such visits are rare. Sand Creek’s clients either supply a recipe, or SCB will help them develop an idea into a drinkable final product. While Sand Creek brews, the clients get to the tough work of marketing the brew and growing their business.

Wiesender and Krueger point to Fulton Beer, based out of Minneapolis, Minn., as one of Sand Creek’s favorite success stories. After years as a Sand Creek client, Fulton Beer has just finished construction on a state-of-the-art brewery in the Twin Cities.

“It’s kind of like watching one of your kids go away for college,” says Wiesender. “We’re very proud.”

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And the partners believe that this is how contract brewing works best — as incubation for ideas.

“Because of the resurgence in the craft market, people have an idea, and they want to come out with the beer. There are some really good ideas for beer out there, and then there are some that are rather... unique and... well, I’m not sure if they’re going to make it or not,” says Wiesender.

Right now, Sand Creek’s contract brewing clients typically produce under 5,000 barrels per year. Some potential clients have approached Wiesender about doing as many as 30,000 to 40,000 barrels, something Sand Creek is not equipped to brew. In a new facility, however, the partners could deliver on this order, supplementing their own business.

### **From Barley To Bottle**

After a major fire broke out in 1932, the Sand Creek building underwent a Depression-style renovation, and the current structure still holds signs of this history, including scavenged, mismatched masonry and a creaky wooden elevator. That elevator still lumbers its way up to what can only be described as the attic of the 150-year-old building, and in that attic is where the beer-making process begins.

The attic and silo outside store 28,000 pounds of barley, which is milled and then stored in a grist case for a few hours until it is ready to use. Each batch of beer requires 1,000 to 2,000 pounds of milled barley; the more barley, the higher the alcohol content.

A chute leads from the attic to the story below, delivering the milled barley into a vat of hot water. As the mixture is stirred, the barley’s starch begins to convert into sugar. After being re-circulated for an hour, the wort is diverted to the brew kettle. The leftover grain is rinsed to remove sugars before being recycled as animal feed for local farms.

A 750,000 BTU gas burner under the brew kettle boils the mixture for an hour, during which time hop pellets are added. As the hops boil, they release their aroma. The cook time and temperature will determine the bitterness and hoppy qualities that the resultant beer will have.

After the brewing process, the beer is pumped into the whirlpool, which brings the heavy residue to the center where it is easily removed from the liquid. After 20 minutes, the beer passes through a heat exchanger, which brings the liquid down to about 65 degrees and can process about 30 gallons per minute.

Before yeast is added, pure oxygen is folded into the mix to replace the oxygen that was boiled off during previous steps. Once the yeast is added, Sand Creek’s beers sit in tanks for an average of 14 days. The first three to four of those days account for the primary fermentation period, which is followed by a reduction in tank temperature during which time the yeast settles and is recovered for future batches.

## **Business Is Brewing**

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Once this process is complete, the beer is filtered to remove any remaining yeast cells. Sand Creek uses Diatomaceous earth (single-cell fossilized plankton) filtration, and filtering a batch of 500 cases can take up to an hour.

After filtration, the finished product is pumped underground into the facility's horizontal bright tanks. Because this process is aided by gravity and the beer is travelling at a downward slope, Sand Creek has almost no waste left in its tanks. The room in which the bright tanks are housed is chilled to 32 degrees. Here the beer is carbonated for 24 to 48 hours before being kegged or bottled.

The bottling room is also found underground, and the beer is pumped from the bright tanks to the bottling line. The bottling system washes, double-rinses and then purges the bottles with CO<sub>2</sub>.

The building itself has been retrofitted to accommodate the bottling line, which arrived slightly longer than the room that was meant to house it. No matter; the partners knocked a hole through a three-foot-thick limestone wall original to the building. Bottles are filled under pressure at a speed of about two seconds per bottle and then conveyed through the opening after being capped, labeled, packaged and cartoned for market.

"We had to knock this out twice," says Krueger. "When we switched from an eight-and-a-half to a nine-inch bottle, we had to knock out that extra half-inch."

### **Ales Well That Ends Well**

Despite the company's increasing success, the partners aren't slowing down plans for expansion. If Sand Creek Brewing Company's growth trajectory remains on course, the brewery will likely outgrow its current facility by mid-2012. At that point, the partners plan to open a secondary facility to keep up with demand.

But the partners are committed to keeping the Black River Falls facility open for business.

"There's too much lore; there's too much goodwill with this place," says Wiesender.

The current plan for the facility involves expanding the company's tap room and using the processing space for "smaller 40-barrel batches," high-end and boutique beers, and barley wines. The majority of production, along with the company's offices, will likely move to an outside location.

Wiesender and Krueger are currently crunching numbers and doing water analysis around the state to help make a final determination of where, when, and how the company will move and grow.

Wiesender is optimistic that the contract business will help to buffer the cost of Sand Creek's move. He notes that because of the revenue generated by contract clients, and the increasing demand for space in his tanks, the company can afford to buy a large facility that they intend to grow into, supplementing its current

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production with contract clients, so that no space is unused and the tanks are always full.

As the partners plan their future, their many fans across the region and prospective clients around the country raise a glass to their success.

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