

Danish Windmill Quarterly Newsletter

THE BREEZE

Inside this issue:

- Director's Message
- Feature Story: The Windmill's Danish History
- News & Updates
- Visitor Information
- Membership Information

Tivoli Fest
 May 24-25
 TivoliFest.com

Director's Message:

Dear Members,

We are now in the second volume of newsletters and could not be more excited to share this issue with you all. First, thank you for your patience with us for getting this out. We have been very busy at the windmill these last few months and it really took a long time to get this one together. We think you'll understand and appreciate why when you look inside!

A lot has happened at the windmill from renovations in the gift shop and an enhanced selection of Danish products, to the creation of wonderful new exhibits in the windmill itself. There is a lot to cover and only so much space, so don't forget to check our regular news updates at danishwindmill.org/news/



As always, please accept our sincere thanks for your support of the Danish Windmill and everything we do. We can't wait to see what this year has in-store for us.

Mange tak!

Shaun Sayres, M.A.
Manager

 **Nørre Snede, DK 1848-1975**
 Celebrating
48 years in
 Elk Horn
 Elk Horn, IA 1976-present 

In 1975, local farmer and Danish-American Harvey Sornson approached the Elk Horn community with an unthinkable idea: to relocate a windmill from Denmark to the United States. It was no easy feat, but to the amazement of most, Harvey's "impossible dream" became reality.

During the winter of 1975-76, an authentic Danish windmill from Nørre Snede, DK was dismantled, ferried across the Atlantic, and transported cross-country to Elk Horn, Iowa. Once arrived, community volunteers set about putting together the pieces one by one until eventually, the old Danish windmill towered over downtown Elk Horn where it remains to this day.

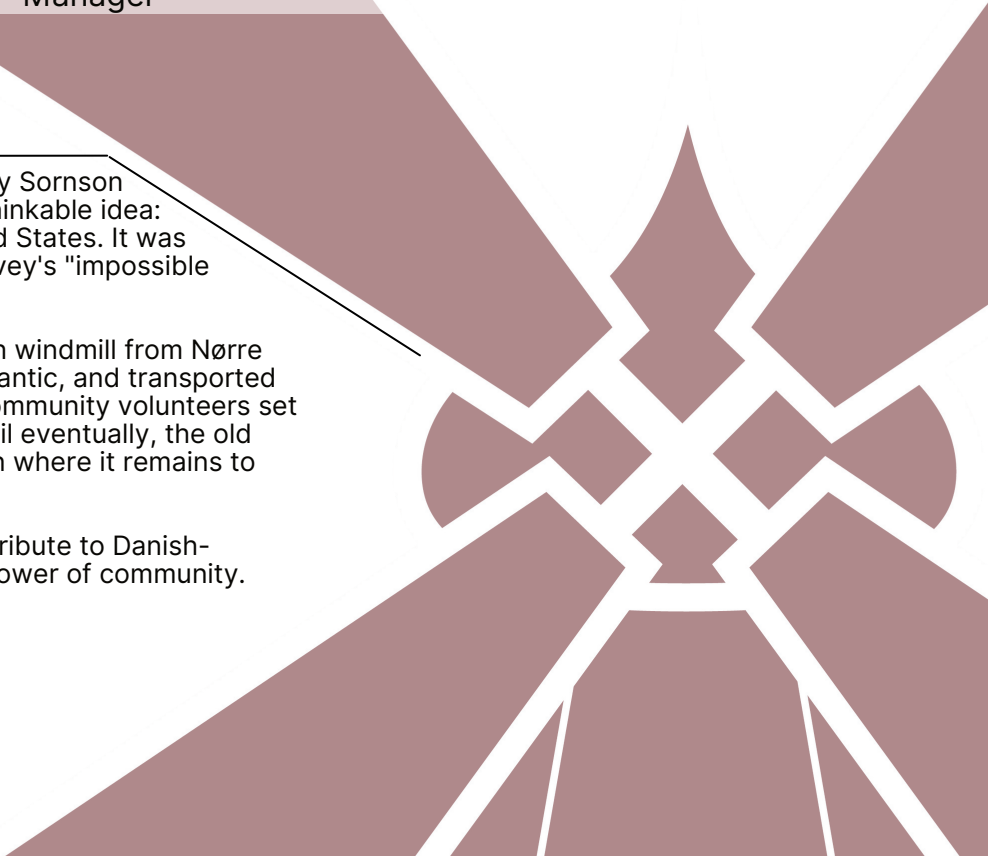
For nearly 50 years, the windmill has stood as a tribute to Danish-American heritage, agricultural history, and the power of community.



Danish Mill Corporation

4038 Main St., PO Box 245
 Elk Horn, IA 51531
 (712) 764-7472

danishwindmill.org
info@danishwindmill.com



Feature Story:

"The Windmill's Danish History, 1846-1975"

While we have been working to uncover and display more of our windmill's rich history, we felt it would be worthwhile to compile a longer narrative of this windmill's Danish past for our friends and supporters. While almost everybody knows about what took place in 1976 and afterward, what came before isn't as well-known or easy to come by. Between at least three fires and two relocations, this windmill has been through a lot.

As we look more closely at the distant past, it also feels necessary to consider the types of sources we're dealing with to retell this story. Primary sources, that is, documents produced during a contemporary period of study, are what historians draw upon to rebuild lost narratives and piece together our kaleidoscopic view into the past. Different types of sources offer varying perspectives that can illuminate completely different elements of a singular event. As we twist our scope from one theme to the next, we find ourselves looking at the same past through a different lens.

How we recount our windmill's history is intimately tied to the sources remaining. We'll primarily be dealing with legal, disaster, and business documents. Each theme offers varying levels of clarity, depth, and meaning. We can only dive so deep in just a few pages, but nevertheless, understanding the types of materials we are dealing with is critical in shaping our own perspective as we travel to a different place and time.

1846-48

Millwright Jens Olesen built the original windmill that would become the one it is today in 1848. We have no record of Olesen's life and very little about the mill after construction.



Kragsskov Mølle in Skagen, Denmark. Built in 1870 in Jerup.

The windmill shown above is an approximate depiction of what the original windmill looked like. In keeping with classical Dutch design, the mill would have had cloth sails and a turning gear (yaw mechanism) or *krøjeværk* used to manually turn the cap and sails into the wind. Like most windmills built in the rural Danish countryside, it stood only 40 - 50 feet (12 - 15 meters) tall, unobstructed by surrounding buildings high enough to block the wind. The body would have been just wide enough to fit all necessary equipment inside, and thatched walls likely covered the exterior. All of this was fairly standard for a windmill in 1848.

We also know the windmill originally powered three kinds of stones, but how we know is even more interesting. Until 1862, the Danish government regulated many aspects of commercial milling. The legal precedents for this relationship dated back centuries to ensure the protection of milling and local food economies in a fragile European world constantly under threat of war, famine, and disease. As part of this intricate system, a millwright seeking to build a mill was first required to obtain a permit from the Royal Exchequer (today's treasury or department of revenue). This permit included a wealth of information including the type of mill to be built, its location, and the

equipment which it would power. We know Jens Olesen built this windmill in 1848 and what it ground because that is part of the permit he had been granted.

But this mill's history is actually more complicated than that. The complex web of laws and regulations that governed the milling industry was not without its expected share of conflict and confusion. Millers and would-be millers litigated constant battles over territorial rights and other related claims. Through this lens, we learn that our windmill's history begins in 1846, not 1848, when Frederik Møller filed for a permit to build a windmill north of Nørre Snede. This story was first uncovered nearly 25 years ago when we commissioned archivist Boum Pyndiah to search for documents related to our windmill in various Danish archives. Pyndiah published his discoveries in a 2001 article for The International Molonological Society (TIMS) which focused on the legal case between Møller and his opponent, Søren Nielsen Møller of Vester Mølle.

Pyndiah uncovered a complex legal case that went on for nearly two years. Without getting bogged down in the details, it can best be summarized as a contest between Frederik Møller and Søren Nielsen Møller over an ordinance passed by the Danish government in 1825.

This law enforced the custom of mølletvang which regulated the distances between mills and limited the construction of new mills. Specifically, a new mill could not be built within 1 Danish mile (4.68 US miles / 7.5 km) of an existing mill. This ensured that new mills would not affect the customer base of established mills and prevented local economies from investing too many resources into a saturated industry. Mills were expensive to build and maintain, and required a degree of local funding and resources in order to function. Allowing too many mills to establish themselves in a small area risked financial ruin for all parties involved and even worse, food shortages for people and livestock. Establishing a set distance by which new mills could be constructed assured protection to the current millers while still leaving enough room for rural communities to grow. This process sounded logical on paper, but proved to be much messier in practice.

Shortly after Frederik Møller applied to build a windmill near Nørre Snede in June 1846, Søren Nielsen Møller, represented by his attorney Albini, submitted his own application. Nielsen Møller owned Vester Mølle, a watermill located on the Skjern River southwest of Nørre Snede. The majority of residents in Nørre Snede and the surrounding area relied on his mill for flour and animal feed.

The map shown here depicts the positions of the three closest mills to Nørre Snede in 1846: Vester Mølle, Smedebæk Mølle, and Ansø Mølle (all watermills). The red windmill indicates an approximate location of the original windmill built in 1848, and the red circle has a distal radius of approximately 4.68 miles. The location of any new mill had to be precise so as to not interfere with established mills, and not coincidentally, Møller applied to build a windmill exactly 4.68 miles away from Vester Mølle.

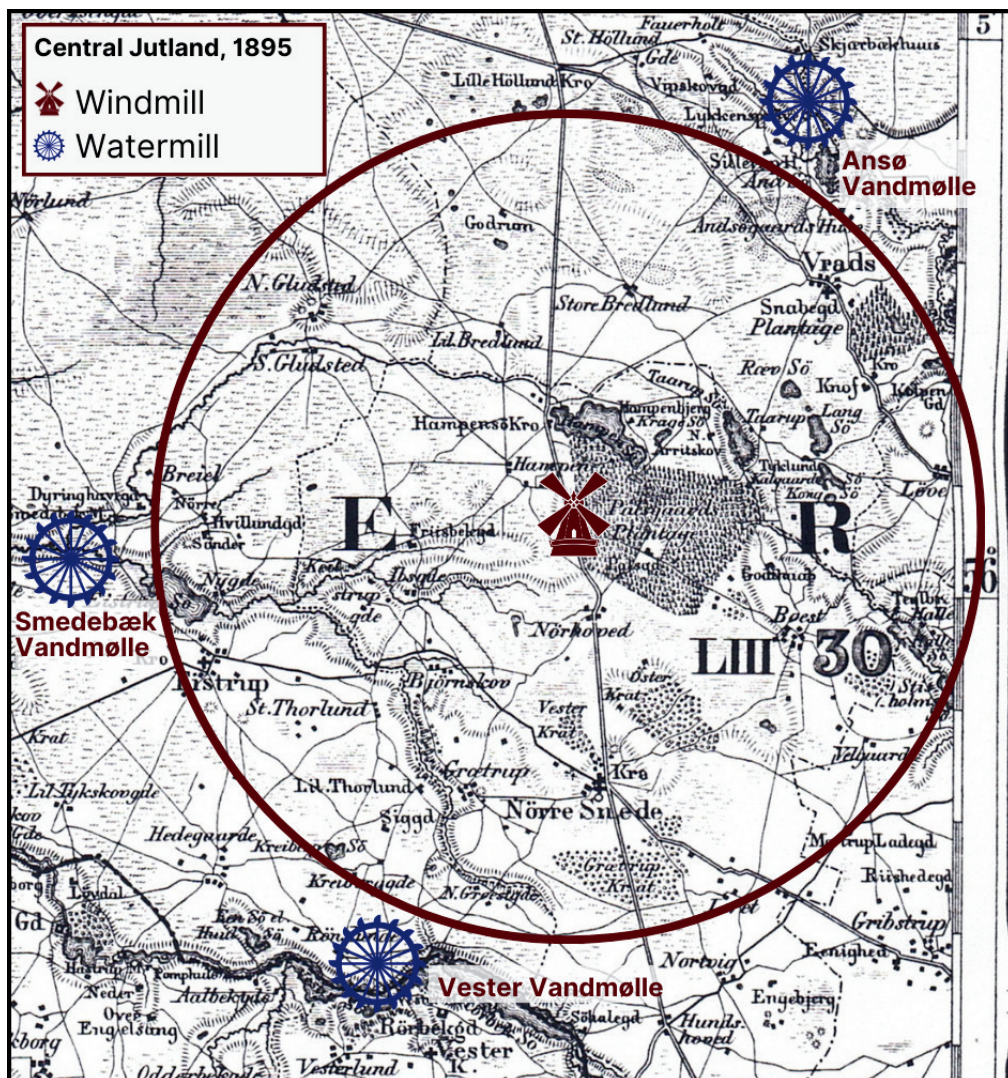
Nielsen Møller was aware of F. Møller's application, and set about to quickly stake his own claim to build a windmill in the area, followed up by character references and petitions by local residents made on his behalf. As a prominent tithe collector for the residents of Nørre Snede, he also tried to invoke the Danish custom

of mølletvang, a custom dating back to a royal decree issued by King Christian IV in 1617 that set precedents for forced patronage between local residents and their mills. Nielsen Møller based his claim on three points: (1) he submitted his application first but it had been lost in the mail; (2) as owner of Vester Mølle he should receive priority to build new mills within his own clients' jurisdiction; and (3) his right to priority has legal precedent via the custom of mølletvang.

The ensuing contest drew out for over a year, involving character references, petitions, and dozens of letters sent back and forth between all three parties plus other millers with a vested interest over the result. The case drew out so long that F. Møller gave up, and sold the equipment he had purchased on addition to

the permit application, to Jens Olesen in June 1847. Olesen resumed F. Møller's arguments that he should be awarded the permit. During this time Nelsen Møller had never purchased land near Nørre Snede to build a windmill, and locals had grown tired of waiting.

In October 1847, a petition in favor of Olesen reached the Exchequer's office in Copenhagen. It featured 53 signatures from residents in Nørhoved, Nørre Snede, Boest, and Hampen as well as the chairmen of the Parish Council. The letter reiterated points for consideration including the poor road conditions and great distance between Nørre Snede and Vester Mølle. Many residents lacked transportation and had to travel by foot, carting their grain in wheelbarrows. If the grain could not be milled immediately, they would have to make the trip twice.

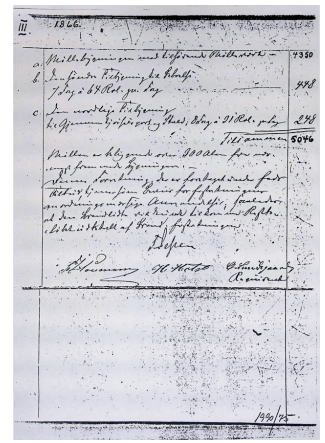
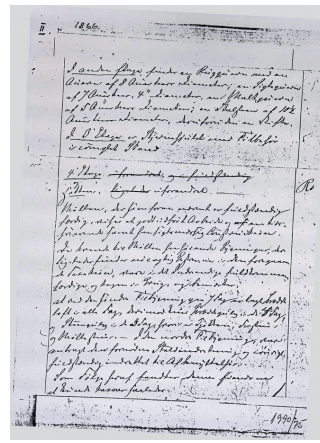
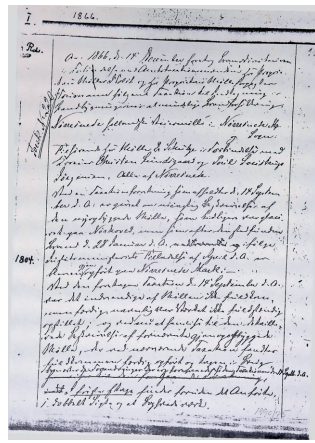


View of Nørre Snede and Surrounding Mills in 1848. Map dated to 1895.

The petition combined with the Exchequer's reading of the law ultimately swayed the office to side in Olesen's favor. The custom of mølletvang assured Nielsen Møller priority, but not exclusivity. In other words, his existing relationship to the residents of Nørre Snede extended from his own mill, not tithe payments. He therefore lacked any right to claim mølletvang over another hypothetical sphere of influence centered on a mill outside the legal distance of his own. Had Nielsen Møller purchased land in the right location, the permit likely would have been his.

On January 27, 1848, Olesen dispatched another letter to the Exchequer, this time including both a declaration from F. Møller regarding the transfer of the original permit rights as well as a second surveyor's certificate indicating the proposed plot was within the legal distance. On April 29, 1848, Olesen received his permit including rights to operate one flour grinder, a grubbesten, and a break stone. After almost two full years of litigation and waiting, the people of Nørre Snede, Nørhoved, and Hampen would finally get a mill closer to home.

This is all we know of the original mill. We hope to one day retrieve the original documents that Pyndiah worked with to see what else we might learn, but what we can glean from the context here, in



Fire Insurance Assessment made September 1866.

addition to the specifics of the permit, is that the original windmill was a classical Dutch windmill built to power three different types of stones. Jens ran the mill for an unknown years, but we know from census data that a Christian Rasmussen was operating the windmill by 1855.

Critically, owing to the 1825 ordinance in question, the mill was not originally built in Nørre Snede, but about 2 miles north between the villages of Nørhoved and Hampen. Following the highway on the map, one can see how Frederik Møller bought land just outside of Vester Mølle's reach, almost exactly 1 Danish mile away. How the windmill would eventually arrive at Nørre Snede is another story, with a different type of sources.

1865-66

The mill re-enters the historical record in 1865 following a devastating fire. By then, Ernst Schultz is listed as the miller, in addition to three owners: Schultz, Christen Lundsgaard (innkeeper), and Poul Sveistrup Jørgensen (all of Nørre Snede).

We don't have many details about the fire including its cause or the extent of the damage. Fires in general are a terrible hazard for windmills which are built of dry timbers, grease, and other components capable of generating sparks around highly-combustible flour. Whatever the cause, it was severe enough that the owners decided to relocate. Starting over enabled the opportunity to move the mill closer to Nørre Snede and away from Nørhoved which had not grown at the same pace. This was possible in 1865 because the laws regulating commercial milling had been entirely abolished by 1862. The restrictions that once kept a windmill from being built in Nørre Snede no longer existed.

Based on insurance filings, we also know the owners used this opportunity to increase the size and capacity of the mill. But with reconstruction nearly complete, another fire broke out in September 1866. According to Poul Svejstrup Jørgensen's 1891 recollection, the fire destroyed the entire inventory of the mill including equipment that had been waiting to be installed. The equipment lost cost the owners another 1,200 kroner in damages,



An early postcard showing what the windmill looked like around 1900.

contributing to a total assessed loss of 13,200 kroner for the entire project. Reconstruction delayed until December 1866. Its grinding capacity was expanded from 3 types of grinders to 4: a rye stone, flour stone, malt stone, and grubbe stone. In the 1800s, rye and wheat required separate stones and barley would be milled using the malt stone. This would be considered a full suite capable of handling anything a windmill might be expected to produce. The increased capacity also required enlarging the mill, and so the body was widened in order to fit all of the grinders on the same floor.

The image on the previous page gives us some hint of what the windmill would have looked like. It still would have had cloth sails and the original yawing mechanism, but it would have had a wider body and likely grew in height, too. Not much else is known about the windmill during this period outside of the changing owners. Another fire assessment appeared in 1888, suggesting another fire took place, but the extent of damage currently remains unknown.

1890-1912

By 1890, and a few different owners later, the mill came under the operation of Rasmus Skov who remained until selling the windmill to Christian Vestergaard in 1913.

The subject material of this period, relating to the studies of scientist, Poul la Cour and the transformation of our windmill, merits its own article. What we can say here is that during this period Skov likely oversaw the switch from cloth sails to wooden shutters as seen in the image below, as well as the installation of the fantail. Both changes relate to la Cour's work in the 1890s on the potential for windmills to generate and store electricity.

We hope to learn more about the Skov family, too. After losing his first wife, he married Maren Hansen in 1893. An existing death certificate places her death at the windmill of breast cancer in the winter of 1905. Skov continued to run the mill for a number of years and purchased a new ledger shortly before selling it to the Vestergaards in 1913.



The charred remains of the windmill after the 1943 fire.

1913-1947

Christian Vestergaard was the final Danish miller to operate the mill commercially. With his wife, Nicoline, and their children, the family oversaw the windmill for over 30 years. The details of which are captured in the Vestergaard ledger donated by descendants of the family in 2012. This ledger is now digitized and available online, and is also on display inside our video room today.

As a business record, the ledger is an incredible resource. Its clients sorted by page map out an intricate web of customers the mill commanded and the variety of goods they expected the windmill to produce. We even see entries in 1945-46 when 'Bager Kjeldsen,' founder of Kelsen Group A/S, the current producer of Royal Dansk Danish Butter Cookies.

While at first glance these transactions appear mundane and ordinary, taken together they reveal the workings of a world that faded quickly. This is another subject deserving of an entire article, but for now we can say that the ledger reveals the arch of the windmill's commercial role from a machine of many trades to almost exclusively

producing wheat flour and animal feed. Vestergaard also did electrical work, and family lore recalls the strong smell of battery acid at the windmill during their visits.

What exactly the windmill did in this regard is still unclear, but based on what other mills were doing in this time period, it likely had turbine wiring installed to charge large batteries, and these batteries could have either been sold or exchanged, much like the way we exchange propane tanks today.

However the relationship between the windmill and electricity went, it is believed to have been a short circuit in the charging station which caused the mill's last fire in 1943. The fire broke out in the dead of night and burned down the mill in just a few hours despite rapid response. Gudrun Vestergaard often recalled hearing the millstones fall through the floor in a thunderous crash.

Despite the technological advancements of the modern age and the windmill's own decline into obsolescence, Vestergaard still chose to rebuild in 1943-44. We don't know what compelled him, but we can at least say he saw a place for windmills in the world transforming rapidly around him.



The windmill after its second reconstruction in 1944.

Vestergaard contracted out millbuilder Ejnar Hansen to rebuild the mill, a seasoned millwright who had built a number of mills around central Jutland. Hansen had worked on the Nørre Snede since at least 1931, and this mill would be the last he built from the ground up during his long career.

Again, this merits another full-length treatment in the future, but we know enough about the reconstruction process worth sharing here. We know this thanks to Jacob Hanquist Petersen, operator of Uldum Mølle where Hansen's account books are today.

These ledgers reveal how Hansen rebuilt the mill in great detail, and it involved taking pieces from 6-7 other mills in the surrounding area. We're still working through what came from where, but the logs show the amount of time Hansen spent dismantling other windmills, the pieces he brought the Nørre Snede, and the labor required to put them back together.

As a result of this process, the windmill's shape changed. It grew taller and thinner. With the industry having shrunk, it is likely a lot of the equipment the mill once had at the turn of the century was no longer necessary. It was this redesign that

remained through the mill's final Danish years.

In 1947, after a long career, Vestergaard sold the mill to Julius and Kirsten Hansen. A retired newspaper editor, Julius had little interest in operating the mill commercially that we know of.

1947-1975

Ejnar Hansen's ledgers also show that the Hansens continued to pay him for annual maintenance and repairs of the mill for the next 20 years, his last recorded visit being in 1967.

In a few instances it appears he ground, but apart from that, it remains unclear how often the mill was used if at all. When the Americans began inquiring about the windmill in 1975, it had been said that the windmill had not been used for about 10 years. The picture shown on the right, taken in 1975, reflects this. Mills that aren't used tend to fall apart and do so rather quickly.

Although many people in Nørre Snede opposed the sale of the mill to the Americans, it ultimately came down to the Hansens' decision. The mill was in poor shape and need of work, but restoring it also meant

turning it into a tourist attraction that would stand less than 50 feet from their home. They explicitly opposed this idea, and ultimately decided to sell it to the Americans and rid themselves of it altogether.

While many people in Nørre Snede miss seeing the mill, many have voiced their approval of Elk Horn's role in saving it. The Vestergaards especially have been gracious in periodically sending us more documents in addition to their approval of the mill's much improved condition since its long journey across the ocean.

More can always be said, but the people of Elk Horn didn't just receive a windmill. A deep and rich history of Danish culture and tradition came with it, one worth remembering and preserving as much as the windmill itself. Only by studying the windmill's Danish past can we truly understand and appreciate the windmill's importance to our own lives and the cultural preservation of Iowa's Danish Villages today.

Shaun Sayres

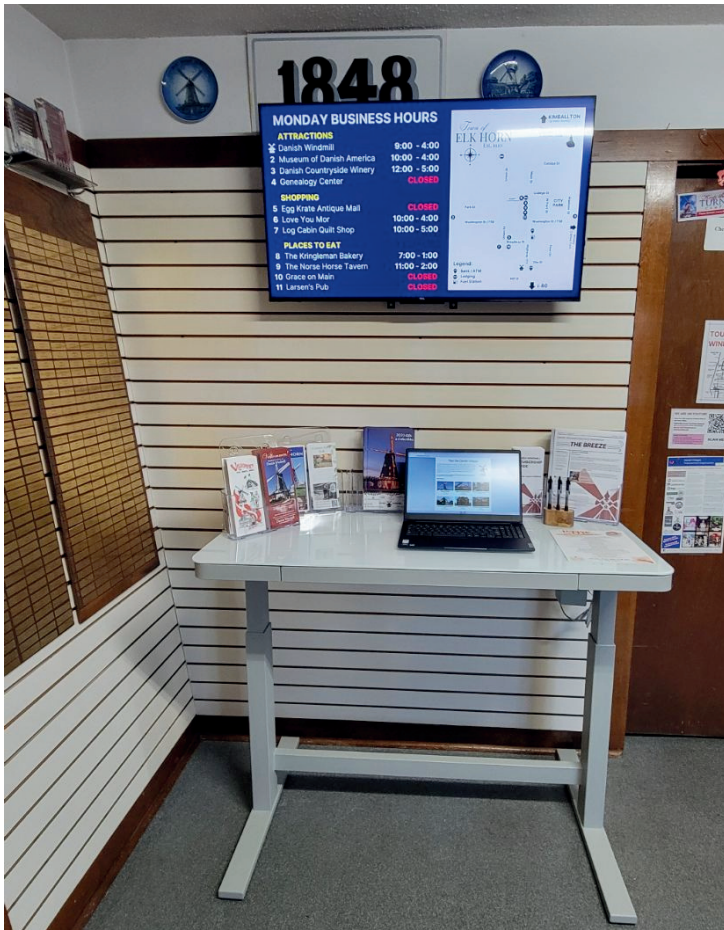


The windmill in disrepair, 1975

News & Updates

We've had some very busy months despite the usual slow traffic of winter. After some snowy weather that kept us closed for several days in January, February proved to be jam-packed. We participated in another 'hygge night' in town and spent a lot of time overhauling certain spaces in the gift shop. Our Christmas wall is now totally revamped with new Danish lines, our Viking toy area has been expanded to include axes, shields, and new helmets, and we now have consolidated all of our candles to one area. Best of all, we redid our kitchen area, complete with a butcherblock countertop that displays all of our aebleskiver pans. These changes were enhanced with fresh paint throughout including the video room and entryway.

Inside the windmill we added a number of education text panels on both the history of the mill and various technical aspects. These are viewable online at danishwindmill.org.



Our new digital welcome center area

We also enhanced our Welcome Center area this year with a TV that displays the current day's local business hours, weather, upcoming events for the Museum of Danish America, and whatever else we want to put on it. More recently, we've added a social media wall which can be viewed online at danishwindmill.org/social. We encourage all to add their posts and help us build a wall of rich content from our most enthusiastic supporters!

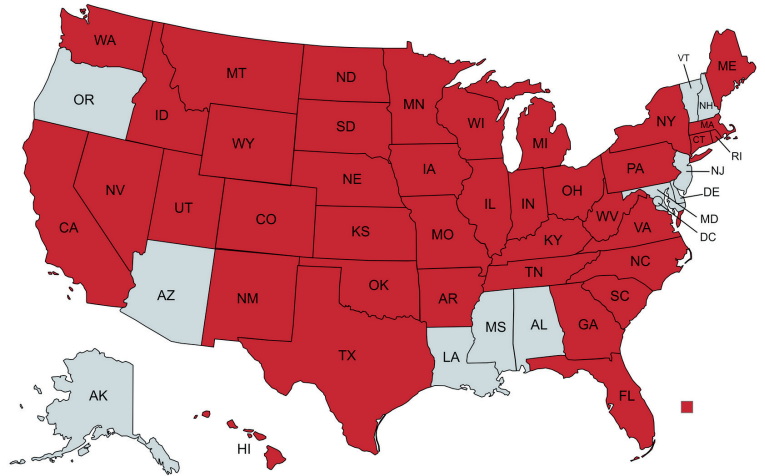
We're also thrilled to announce that we've received a few grants so far this year including \$8,000 from the Shelby County Community Foundation to build a new entertainment building, and \$2,000 from the Shelby County Community Chest for a new sound system. These will be invaluable assets to improve our outdoor entertainment offerings, especially our folk dancing events.

Finally, we need to extend our sincere appreciation for the Mike & Lou Howard Foundation for their gracious donation of \$48,000! This funding has ensured we may continue to work with Møllebygger Petersen in improving the windmill later this year.

Visitor Information

This is a slow time of year for us, but we still had visitors from 39 states and Puerto Rico!

- 1,600 visitors signed our guestbook
- 8 foreign countries including Canada, Colombia, Denmark, Germany, Kuwait, Mexico, Saudi Arabia, and Tahiti
- Top states: IA, NE, MN, CO, WI



HELP US SAVE PAPER

To save paper (and postage), you can elect to receive *The Breeze* electronically. If you would like to switch to paperless, give us a call at (712) 764-7472 or email us at info@danishwindmill.com.

Are you a member?

Become a member today and receive direct copies of *The Breeze* by mail or email. Scan the QR code to learn more.

Family memberships now available!

Additional benefits include:

- Free tours of the windmill & vikinghjem
- 10% off in the gift shop and online
- Direct access to news, updates, and catalogs
- Access to our digital archive
- Pride of supporting a local museum



Become a member today:
call (712) 764-7472 or visit danishwindmill.org/membership