

Clare Hintz enjoys the warmth of her greenhouse.



Story and photos by Beth Probst

WINTER GREENS

In the midst of winter,
this greenhouse gardener
tends a remnant of spring.

On a brisk winter day when even the bright sun looks cold, I make my way to Elsewhere Farm outside of Herbster, Wis., to learn more about Clare Hintz and her year-round farm.

You don't typically hear of farmers harvesting luscious salad mixes in January in the northernmost tip of Wisconsin. But then again, nothing about Clare Hintz is typical.

For the past 10 years, Clare has planted hundreds of apple, pear and other fruit trees throughout her 40-acre spread. She spends her summers harvesting more

than an acre of fresh vegetables for local stores, restaurants and farmers' markets. But, like many farmers, she's seeking creative ways to secure income in the cold months.

Today, she runs a 10-family Community Supported Agriculture (CSA) farm from a 12-by-24-foot greenhouse attached to the front of her home. The operation, which nets about \$4,000 per season for Clare, takes her approximately one day a week to manage. In addition to supplying fresh greens to CSA members, the greenhouse is a warm, luscious, vibrant green escape from winter's

dreariness.

"I can walk out there in the middle of winter and when the sun is out, it is 80 degrees in my greenhouse," Clare says. "I can sit in there and read a book, inhale oxygen and the fresh scent of plants and stay sane. As much as I love winter, this is really nice."

Getting Started

Clare learned the logistics of a winter greenhouse from Carol Ford and Chuck Waibel of Garden Goddess Greenhouse in the northwest Minnesota city of Milan. These northern farmers have mastered

Mixed greens fill Clare's growing gutters.



Kale and parsley thrive in the greenhouse.



Angled troughs catch the sun.



Elsewhere Farm winter greenhouse

the art of growing greens year-round and share their findings in *The Northlands Winter Greenhouse Manual* (Goddess Garden Publications, 2009).

For Clare, touring their greenhouse in midwinter was a life-changing moment. “This was a whole new frontier,” Clare says. “This was months of winter in northern Wisconsin that could actually be a revenue-producing stream for me as a farmer.”

It also addresses people’s desire for locally grown vegetables during winter in cold climates. “People in my CSA are paying salad-mix prices for a very high end

salad,” Clare said. “In the first 24 hours of harvesting vegetables, 50 percent of their nutrients go away. In the store, you might be getting something four or five days after it was harvested, if you’re lucky. In a CSA, you’ve already eaten the food before the stuff in the store even makes it to the shelves.”

A Working Greenhouse

The key to a successful winter greenhouse is its foundation. This means a foundation that exists below the frost line. For Clare’s greenhouse, a backhoe excavated the entire area of the greenhouse 4 feet

deep. After the foundation was poured, clay, gravel and soil were added to the pit. Drain tiles handle excess moisture and air hoses allow for circulation of the greenhouse’s warm air into the rich soil, which radiates the heat back at night. Full-size plants such as green onions, chard, kale, parsley and collards thrive in the soil. Moving upward, a series of rain gutters



Growing Greens



Lettuces grow slowly in winter.



Clare hangs planters in layers.



Yes, that is a snowbank outside.

suspended from the ceiling creates a multi-tiered garden, maximizing space and providing a diverse selection of mustard greens, Asian greens and herbs.

The greenhouse relies on simple, passive solar design components. The air inside the greenhouse warms up and gets diverted underground through a pipe. There, the heat is stored in the gravel. A small back-up propane furnace ensures temperatures never drop below 40 degrees F.

Clare used a kit when she built the greenhouse. While the kit was very easy to put together, it wasn't a perfect fit for

her home, she says. As a result, she encourages those considering an add-on to either find the perfect fit or work with a carpenter. She also suggests painting the greenhouse frame white because research shows that white is the best way to filter additional light into your house. Finally, cover your greenhouse with a polycarbonate plastic sheet that provides a higher insulated R-value and is less likely to break than other greenhouse covers.

Once you have the structure in place, Clare says it is important to understand the seasons of the sun and what will grow during those seasons.

Diminishing: This tends to run from late September to mid-November. During the diminishing season, Clare focuses on various leaf lettuces, arugula, kale and chard. It is important to plant arugula now so the plants will survive as the weather gets

Lettuce seedlings



Clare plants chard in the ground of the greenhouse.

colder even though they won't necessarily grow.

Solstice: This season runs from late November to early January. Mustard greens, such as 'Tokyo Bekana', continue to be a mainstay. Clare also plants and harvests a variety of Asian greens, such as 'Mizuna' and 'Tatsoi'.

Expansion: The winter CSA ends during the expansion season that runs from mid-January to late March. By this time, the light is starting to return so Clare will add leaf lettuce back in, along with some arugula. She'll continue to have mustards. She might also add some cilantro or cress

to add variety to the boxes.

Try It at Home

Clare is quick to point out that you don't need to be a full-time farmer or live in a rural area to re-create this gardener's dream. While a greenhouse addition is not for everyone, many of these plants can be grown in your home. For those with a sunny window, a series of planters hung vertically can hold winter greens. Microgreens—salad vegetables picked just after the first set of leaves develop—are an option for those with even less space.

Suggested Reading

The Northlands Winter Greenhouse Manual: A unique low-tech solution to vegetable production in cold climates, Carol Ford and Chuck Waibel (Goddess Garden Publications, 2009).

—B. P.

Final Tips

Plant Extra: Be sure to plant several different varieties of plants to discover what works best in your lighting conditions. Each winter is different and the more varieties you try, the better you will understand what works in your specific environment. Plus, if you lose some plants, you will have back-ups. (Growth rates slow down exponentially as the light diminishes so starting over is difficult.)

Plan Ahead: Establish several Plan Bs, especially if you are going to share your veggies with friends. If several weeks of clouds slow your plants' growth, have a back-up plant in place to harvest. Also, gardening supplies, such as greensand, become difficult to purchase once the gardening season has ended.

Finally, be sure to have fun. Like many gardening projects, greenhouse growing is about experimenting and learning from experience. Use your imagination and, most important, get ready to enjoy some amazing salads that your friends and neighbors will envy. □

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