

Freeze-drieds offer florists fresh alternatives

You've heard of freeze-dried coffee, freeze-dried fruit and even freeze-dried animals, but freeze-dried flowers? The frozen beauties are the latest floral product to come on the market.

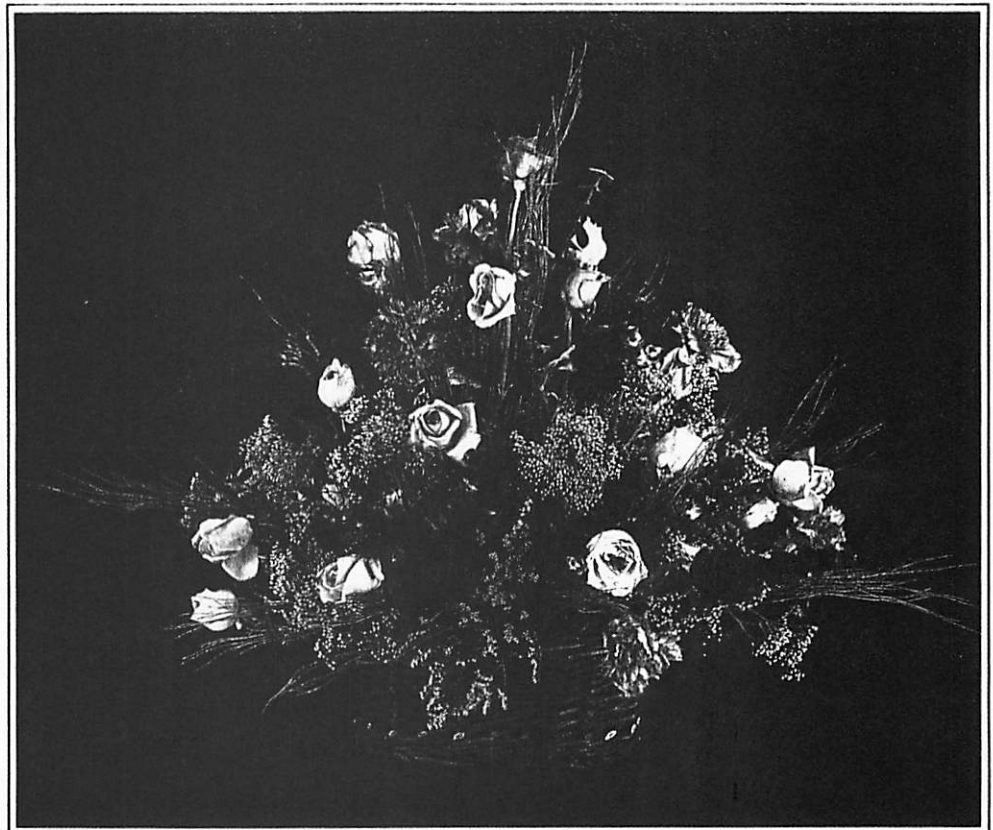
by Jean Adamczak

Cold temperatures are a retail florist's worst enemy. Air that feels cool and refreshing to humans can be the kiss of death for some fresh flowers. Yet, even as you read these words, flowers are deliberately being frozen and preserved with amazing results.

Freeze-drying is the latest technology in preserving flowers. Many flower varieties come through the freeze-drying process extremely well, looking as healthy as they did at harvest, yet able to last much longer than any fresh flower. Freeze-drieds provide florists with fresh alternatives to offer customers and new opportunities to increase profits.

Museum pieces

Leading the way in freeze-drying technology is Northstar, Nisswa, Minn. Steve Schuett, Northstar special projects director, claims the company pioneered and en-



gineered the floral freeze dryer, introducing and marketing the concept in the fall of 1987. Since then, the company has made and sold 115 cryogenic machines for use in the floral industry. The biggest advantage freeze-dried flowers have over other floral product is their look, Schuett noted.

"Properly done, a freeze-dried flower will have the same shape and color as it did when it was fresh," he said. "Because the flower's cells don't collapse when being freeze-dried, the bloom won't shrivel or shrink as it may during some other drying or preserving processes. The result is a long-lasting flower that looks very similar to a fresh flower."

Flowers aren't the only products being freeze-dried in Northstar's machines. In fact, company founder Roger Saatzer first developed a freeze-drying unit for a tax-

idermist who was working with the Smithsonian Institution on new methods of preserving zoological specimens. The machine worked so well that many were sold to museums and universities for use in taxidermy and preparing dioramic exhibits. Today, in addition to taxidermy, freeze dryers are used to salvage water-damaged antiques, books and other items; anything damaged by moisture or water. Eventually, though, Saatzer turned his attention to preserving flowers.

"Freeze-drying is an expensive drying method, but it's the best, so even in the early '80s we were experimenting and running loads of flowers in machines," Schuett acknowledged. "Over the next couple of years, we heard from some entrepreneurs who bought the machine and experimented with drying flowers in it and we came to the realization that the ma-

chine needed to be adapted for higher moisture removal. Products like flowers have a much higher moisture level than small animals, so we adapted the machine to accommodate that high-moisture content."

The result is a seven- to 12-day process (depending upon the flowers' moisture content) during which the blooms rest on shelves in a copper-and-steel cylindrical chamber that looks similar to an iron lung. Available in small, medium and large sizes, these portable, tube-shaped machines can process anywhere from 800 blooms in the smallest machine to 9,000 stems in the largest, Schuett reported. The machine's flower capacity depends on the size and shape of the blooms, he added.

Before placement in the freeze dryer, flowers may be pretreated with chemical preservatives designed to stabilize them during the

Adamczak JB

process, helping to retain their color and appearance. The flowers are then placed on wire mesh racks in the cylinder or suspended within the machine, depending on the desired look. When all the flowers are in place, the see-through Plexiglas door is closed and locked, creating an airtight chamber.

At the flick of a switch, the air inside the chamber begins to cool. Freeze-drying preserves by sublimation, using cold and vacuum to change moisture from a solid state, in the form of ice crystals, to a gaseous state without passing through a liquid state. This requires temperatures of about minus 30 degrees F. According to Schuett, this process results in a remarkable retention of the bloom's original shape and appearance.

"Since the flower is frozen while being dehydrated, it doesn't change shape, there is no wilting," Schuett pointed out. "Freeze-drying allows the water to be quickly and easily removed from the flower's cells without the cells collapsing or being damaged. When all the water has been extracted, only the solid materials remain."

Frozen in time

Imagine a machine that can freeze a memory: a girl's first corsage, a bride's wedding bouquet or a prize-winning floral design. Sandy White, owner, Flowers by Sandy, Memphis, Tenn., bought such a machine two years ago. So far, the freeze-dried flowers are a hit with customers.

"Customers love the freeze-dried flowers," Mel Johnson, a designer at Flowers by Sandy, related. "We do a lot of preserving of wedding

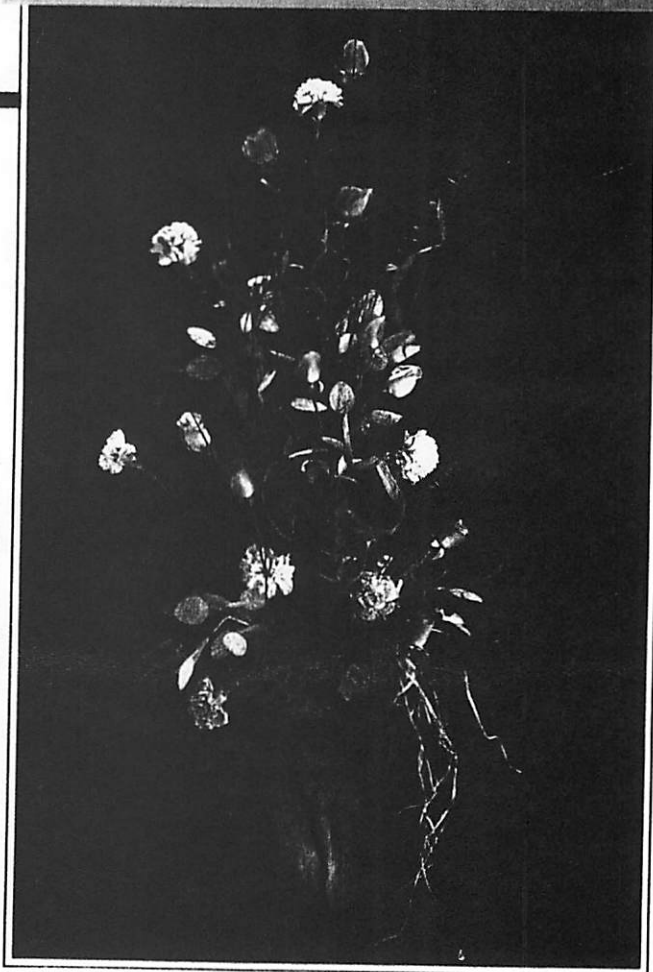
bouquets and funeral flowers; that makes up the majority of our freeze-dried work. People bring in roses, carnations, whatever flowers were used in a funeral service that they want preserved. Brides bring in their bouquets for us to process and we've even done entire wedding parties where we preserve the bride's bouquet, all the attendants' flowers and the wedding centerpieces.

"We also do some custom work like moss-covered baskets filled with freeze-dried flowers or topiaries using freeze-drieds, but on an everyday basis we don't sell arrangements made entirely out of freeze-dried flowers because they tend to be very costly," Johnson continued. "A good-sized freeze-dried flower arrangement could run anywhere from \$250 to \$500 and you have to have a special clientele to really market that type of product. What we tend to do is mix freeze-drieds with other types of dried product in arrangements. That helps keep the prices down so more of our customers can afford them."

Affordability is one of the things florists should consider before entering the freeze-dried production market, Johnson said.

"We purchased the medium-sized machine from Northstar and it cost \$23,000," he said. "Add to that electricity costs (all of Northstar's machines run on a 220-volt current) with maintenance costs and labor and you end up with a lot of expenses that you have to make up for in sales."

To recoup his original investment, White charges approximately \$7.50 for a freeze-dried rose, Johnson said. He



charges about \$100 to preserve bridal bouquets and around \$50 for an attendant's bouquet, according to Johnson. No matter the price, customers seem willing to pay for preserved product, he said.

"I think there's definitely a market for freeze-dried flowers, especially for us, because I think we're the only shop in the mid-South that has a machine," Johnson pointed out. "We even receive bouquets from out-of-town brides who want us to preserve their flowers. We've done so well with the machine that we haven't even promoted it or our preservation service yet. We're basically keeping the machine loaded just by word-of-mouth."

Massive quantities

Paul Geer wanted an edge, a piece of the marketing pie that no one else had. He found that advantage with freeze-dried flowers.

"I had been into flowers from the growing aspect and went into selling flowers at arts-and-crafts shows," Geer explained. "I saw some freeze-dried product that had

been dried experimentally and I liked the way it looked. I got into that end of the business thinking I could sell all these freeze-dried flowers and buy dozens and dozens of flowers to preserve, but it didn't quite work out that way."

Instead, Geer owns and operates Frozen Creek Florals in Belmont, Mich. His growing company has two divisions: one concerned with selling premade freeze-dried arrangements at arts-and-crafts shows, industry trade shows and luxury home shows; the other is wholesale, providing mass quantities of freeze-dried product to retail florists, other wholesalers and arts-and-crafts boutiques across the country. So far, freeze-dried flowers have been very good to him, Geer said.

"Producing freeze-drieds has given me markets, like the arts-and-crafts market and the home market, that I go into with permanent arrangements," he related. "The edge it's given me is that I have something unique and that, in essence, is actually doing financially better than I

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—Steve Schuett, Northstar

had anticipated, even for the wholesale direct market.”

As of August, Geer had two of Northstar's medium-size machines, each turning out approximately 5,000 stems of freeze-dried product a month. Roses, irises and daffodils are the best freeze-dry candidates and the most popular with wholesalers, he said.

“Roses preserve really well, especially in the pastel colors,” he said. “They look so realistic and go well with just about any decor now. They also fit in well with the Victorian baskets I make for the arts-and-crafts shows.”

The nine-inch Victorian baskets usually contain roses, daffodils, irises, peonies and other freeze-dried product. They sell for about \$50 each, he said, while roses are sold to wholesalers for \$18-\$24 a dozen, depending upon the volume purchased.

“I command a good price for my product,” Geer admitted, “but I pride myself on quality of product. If I don't like the way a flower turns out, it'll end up in potpourri. The bottom line is it's my name on the business card and I want people to think I do good work.”

To promote his freeze-dried product, Geer hits the road, traveling to industry trade shows and conventions, home shows and arts-and-crafts shows. Between he and his fiancée, 40 weekends a year are spent traveling to promote freeze-drieds. Yet there's always more ground to be covered.

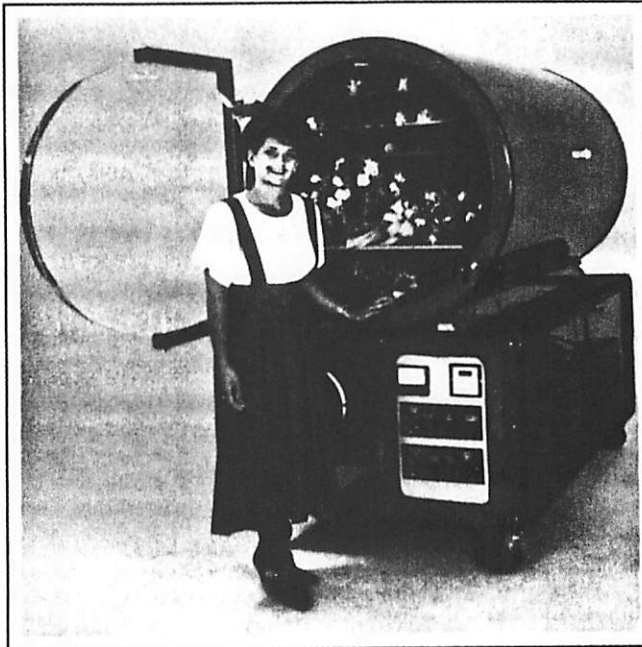
“I see what I'm covering and sometimes I wish I could do a better job and cover less, but I've taken a scatter-gun approach in trying to pull customers in from the largest areas,” Geer said. “I'm finding that just the wedding work

alone could tie up two machine loads a month.

“We're building our wedding bouquets by doing mass freeze-drying and then assembling the bouquets from that product as opposed to taking fresh bouquets and running them through the freeze-dryer,” Geer continued. “Because of the subtle color changes that occur

for florists to position themselves, it can also be a costly, time-consuming one. Knowing the machine inside and out is a must for successful operation, Schuett noted. Northstar educates new owners and any interested employees by sending a technician along when the machine is delivered.

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Northstar, Nisswa, Minn., claims its floral freeze-dryer produces preserved flowers with the shape and color of fresh.

during the freeze-drying process, we want people to be aware that flower colors going into the machine do not always come out looking the same. The greens are a little more fragile, the reds may not be as red as before, things like that. I want every customer to be satisfied with the freeze-dried product purchased from me.”

Learning the ropes

While the freeze-dried market can be a profitable place

for florists to position themselves, it can also be a costly, time-consuming one. Knowing the machine inside and out is a must for successful operation, Schuett noted. Northstar educates new owners and any interested employees by sending a technician along when the machine is delivered.

“An important part of freeze-drying is having a technician come right to your business, install the machine and explain how it works,” he said. “There are levers and dials and gauges that many people who aren't technically minded are afraid of.”

In addition to its technical aspects, the sheer size of a freeze-drying machine can be intimidating. Northstar's best-selling model is its medium-sized machine which has a self-contained refrigeration system and approximately 40 cubic feet of freeze-drying ca-

capacity. The bright-blue cylindrical machine is about 6 feet long, 6 feet high and weighs 1,800 pounds. Wheels enable the machine to be rolled into place. The levers and dials Schuett referred to are located at the machine's front where they can be easily viewed and monitored.

“It's not a difficult machine to understand, but once you turn on the vacuum you don't just leave it alone for a week,” Schuett said. “You have to monitor the temperature, adjusting and raising it to thoroughly dry the product. In one of our models the oil must be changed every two or three weeks. In all models the small cylinder that gathers moisture while running at minus 60 to minus 70 degrees F. must be defrosted occasionally. So it's not totally maintenance-free. Most of the florists who have the machine usually appoint one person to work with it.”

At Flowers by Sandy, that person is Johnson, who thoroughly enjoys working with the freeze-dryer.

“I find it real interesting,” Johnson said. “It really is on the cutting edge of technology because the machines have just been introduced to the floral industry within the last couple of years. We're trying new varieties of flowers in the freeze-dryer all the time.”

Geer also experiments with different product in his freeze dryers, but said he pretty much has the process down to a science now.

“I know how long it will take me to preserve a mass of 3,000 open roses so they're relatively uniform in shape,” he said. “It all comes from experience. I can tell just by looking at the vacuum and the temperature just how far along a load is and how long

it'll be before the process is through. Basically, what dries the best for me are roses, irises and daffodils, but that's just been my experience."

According to Schuett, results vary with each machine and depend upon such factors as atmospheric pressure and sea level.

"It's really hard for me to give people one manual which tells how to freeze-dry each particular variety of flower because of all the variables involved," he explained. "People usually dry all types of product and settle on what works best for them in their machine and in their market.

"This is not a foolproof or guaranteed franchise," Schuett cautioned. "One of the biggest variables with freeze-drying is the ability to market and sell the product. People can freeze-dry beautiful flowers but they can go out of business if they don't know how to get the visibility and promotions to sell them."

Educating consumers and even those in the floral industry about freeze-drieds is often necessary, Geer noted.

"The best promotion I can do is take finished product out to different events and show its different applications," he said. "Even with the great designers out there, not everybody looks at a dozen roses lying in a box next to a sign that says 'Freeze-Dried' and says, 'Hey, what I could do with those flowers!' Whether you're using long stems or just heads, freeze-drieds have different applications.

"There used to be a lot of resistance from florists who were against having flowers on the market that didn't need to be replaced every week. But once they realized the product's market potential,

the product's beauty and the fact that they could tap into the freeze-dried market, they relented a bit. There's a tremendous market out there for this product that florists can take advantage of."

Schuett also noted that many florists felt the freeze-dryer's high price tag was cost-prohibitive.

"Most florists wouldn't dream of spending \$23,000 on a machine, which is what our medium-size model costs," he said. "But they need to look at it as a business opportunity, not as a craft tool, hobby or toy. It's a business tool. It's not a liability for a florist, it's a promotional opportunity, a moneymaker. Handled properly, freeze-drying could almost be a business in itself."

Whether a florist chooses to invest in a freeze-dryer or simply purchase freeze-dried product from suppliers, one thing is certain: Freeze-dried product is here to stay and, according to Schuett, the market is just beginning to grow.

"We haven't scratched the tiniest surface in the floral industry," he said. "My numbers tell me there are up to 80,000 retailers, wholesalers and growers out there. When you add all the craftspeople and boutique owners, that puts our potential customers at well over 100,000. Freeze-drying is an amazing concept and a product that will be around for years to come."

(For more information on freeze-dryers, contact Schuett at Northstar, P.O. Box 409, Highway #371 N., Nisswa, Minn. 56401, (800) 551-3223 or (218) 963-2900. For information on freeze-dried flower suppliers in your area, contact your wholesalers.) □

Tips on marketing freeze-dried flowers

Part of successfully marketing freeze-dried flowers depends on educating consumers about them and promoting them. Steve Schuett, special projects director at Northstar, a freeze-dryer manufacturer and distributor in Nisswa, Minn., offered the following marketing tips for newcomers to the freeze-dried field:

• WEDDING BOUQUETS:

Promote the preservation of wedding bouquets and flowers by distributing brochures or fliers to customers during wedding consultations. Work in tandem with bridal salons and formal wear shops, distributing brochures to their customers. Be sure your business card and price list are included in the brochure.

• SENTIMENTAL KEEPSAKES:

Special arrangements, bouquets and/or corsages from anniversaries, funerals, graduations, births, confirmations, engagements, reunions, birthdays and other occasions can be preserved and placed under glass domes or in shadow boxes, making them everlasting.

• COMMERCIAL ACCOUNTS:

Create seasonal arrangements that can be replaced every few months to provide businesses with a fresh look.

• WHOLESALE AND DISTRIBUTING:

Process large quantities of flowers to sell to other florists in your area who don't have freeze-dryers. On a larger scale, process mass quantities of product for sale to wholesalers, making sure you have the necessary time and resources.

• INDIVIDUAL FLOWERS:

Offer customers freeze-dried flowers by the stem or let them create their own bouquet using freeze-dried stems. Add freeze-dried stems to other dried product arrangements to create higher price-points. Freeze-drieds also work well in wreaths, garlands, swags and topiaries.

• POTPOURRI:

When a freeze-dried flower doesn't meet your high-quality standards, don't throw it out, use it in potpourri. Sell bags of freeze-dried potpourri, enhancing the scent with fragrance oils.

• RECYCLE:

Fully opened flowers that don't sell in the cooler can be freeze-dried and preserved in full bloom. Did you overbuy for Easter this year? Don't worry. Freeze-dry the surplus and turn excess products into profits.

• CUSTOM SERVICE:

Offer to create custom-made arrangements to help businesses celebrate grand openings, special sales, open houses, bridal shows, etc.

• **CONSIGNMENT:** Create arrangements to be leased to other businesses like gift shops, jewelry stores, bridal salons and formal wear shops which may use the designs in window or in-shop displays. Make sure your shop gets credit for creating the arrangements.

• **NEWSPAPERS:** Promote the arrival of your freeze-dryer by letting your local newspaper know you're getting a new, high-tech piece of equipment.

• RESEARCH AND DEVELOPMENT:

Experiment by running new and different flower varieties through the machine. You never know what's going to work. -J.A.