

FLORISTRY

Writer:

Barbara Rothenburger, Ph.D.
Instructional Materials Laboratory
University of Missouri - Columbia

Consulting Editor:

Robert J Birkenholz
Agricultural Education
University of Missouri - Columbia

Veronica Feilner, Editor and Project Coordinator
Sherry Mahnken, Assistant Editor
Instructional Materials Laboratory
University of Missouri - Columbia

Produced by and available from:
Instructional Materials Laboratory
University of Missouri-Columbia
1400 Rock Quarry Center
Columbia, Missouri 65211
1-800-669-2465
www.iml.coe.missouri.edu

Volume 28
Number 2

Catalog Number: 10-2900-S
February, 1996

ACKNOWLEDGMENTS

Recognition is given to advisory committee members for providing their valuable time and suggestions in developing this floristry curriculum. The committee consisted of Ralph Ball, Carol Smith, Robert J. Birkenholz, Ray Blake, Randy Garrett, Bill Holden, Steve King, Delbert Lund, Nic Natarrella, Sherie Rodekohr, Ray Rothenberger, and Jim Welker.

Special recognition is given to David Trinklein for providing technical expertise. Most illustrations were prepared by Carla Steck, a freelance graphic artist.

Appreciation is expressed to the following staff members of the Instructional Materials Laboratory for their efforts in producing this material: Harley Schlichting, Director; Phyllis Miller, Associate Director; Dan Stapleton, Assistant Director; Jan Trimble, Word Processor; and Lisa Street and Laura Haynes, Editorial Assistants.

Veronica Feilner, Editor and Project Coordinator
Sherry Mahnken, Assistant Editor
Instructional Materials Laboratory
University of Missouri-Columbia

Robert J. Birkenholz, Associate Professor
Agricultural Education
University of Missouri-Columbia

FOREWORD

The development of the *Floristry* curriculum guide is the result of suggestions by the MVATA Teaching Aids Committee. The Floristry Advisory Committee suggested the topics to be included and reviewed the materials.

This seven-unit curriculum contains 30 lessons. Topics include: the floristry industry, plant identification, post-harvest handling, the mechanics of floral design, basic principles of floral design, construction of various types of designs, and shop operations. An instructor's guide can be purchased separately.

During the summer of 1981, the Missouri State Board of Education formally adopted the concept of "Instructional Management Systems" (IMS) as a priority for the 1981-82 school year. The Missouri Commissioner of Education described the IMS concept as a practical way of "organizing for excellence" in education. To meet the demand for greater productivity and accountability, the director of Vocational Education applied the elements of IMS to form the Vocational Instructional Management System (VIMS). The VIMS process provides a framework to use in planning and organizing to assure excellence in Missouri's vocational education system by focusing greater attention on the management of teaching and learning.

The instructor's guide to accompany this student reference incorporates the needed component parts to aid agriculture teachers in the implementation of VIMS.

Robert J. Birkenholz, Associate Professor
Agricultural Education
University of Missouri-Columbia

Terry Heiman, Director
Agricultural Education
Department of Elementary and
Secondary Education

FLORISTRY

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
FOREWORD	iii
UNIT I - FLORISTRY INDUSTRY	
Lesson 1--Structure of Floristry Industry	I-1
Lesson 2--Career Opportunities	I-5
UNIT II - PLANT IDENTIFICATION	
Lesson 1--Plant Botany	II-1
Lesson 2--Identifying Plants	II-7
UNIT III - POST-HARVEST HANDLING	
Lesson 1--Plant Processes Affecting Shelf Life	III-1
Lesson 2--Processing Cut Plant Materials	III- 3
Lesson 3--Caring for Potted Plants	III-5
UNIT IV - MECHANICS OF FLORAL DESIGN	
Lesson 1--Floristry Tools and Supplies	IV-1
Lesson 2--Constructing Bows	IV-7
Lesson 3--Containers	IV-11
Lesson 4--Wiring and Taping	IV-15
Lesson 5--Packaging Flowers and Arrangements for Delivery	IV-19
UNIT V - BASIC PRINCIPLES OF FLORAL DESIGN	
Lesson 1--Identifying Basic Principles of Design	V-1
Lesson 2--Identifying Basic Design Shapes	V-3
UNIT VI - TYPES OF DESIGNS	
Lesson 1--Uses of Floral Designs	VI-1
Lesson 2--Corsages and Boutonnieres	VI-5
Lesson 3--Bud Vases	VI-9
Lesson 4--One-sided Arrangements	VI-11
Lesson 5--Centerpieces	VI-13
Lesson 6--Wreaths	VI-15
Lesson 7--Silk Arrangements	VI-19
Lesson 8--Dried Arrangements	VI-21
Lesson 9--Dish Gardens	VI-23
UNIT VII - SHOP OPERATIONS	
Lesson 1--Sales Transactions	VII-1
Lesson 2--Floral Delivery	VII-9
Lesson 3--Calculating Prices	VII-11
Lesson 4--Taking Inventory	VII-13
Lesson 5--Creating a Display	VII-15
Lesson 6--Maintaining the Flower Shop	VII-19
Lesson 7--Advertising	VII-21

Lesson 1: Structure of the Floristry Industry

In order to work in the floristry industry, it is important to be familiar with its past, present, and future. This lesson examines how the floristry industry fits into the three major divisions of floriculture. The major flower production areas, the history and development of floral design, and the importance of floristry in Missouri, the United States, and the world will all be explored.

The word floriculture comes from two Latin words: "flora," which means 'plants,' and "Cultura," which was the name for the goddess of flowers and from which our word "culture" (as in "the care of") is derived. Hence floriculture simply means "culture or care of plants."

Floristry and the Floriculture Industry

Floriculture is the business of growing, harvesting, storing, designing, and selling flowers and potted plants. Cut flowers, flowering potted plants, potted foliage plants, cut foliage plants, and bedding plants are all included in floriculture. Retail floristry, a division of the floriculture industry, is concerned mainly with the handling and designing of flowers and live plant materials.

The floriculture industry first developed in the United States around the larger metropolitan areas, such as New York and Philadelphia.

During the 1950s refrigerated trucks, railroad cars, and jets became the primary means of flower and plant transportation. They enabled floriculture growers to ship their products over longer distances and to produce cut flowers in areas where warmer temperatures lowered production costs.

Intercontinental jet transportation has also made it possible to produce cut flowers where environmental factors are ideal and labor costs are low. For example, carnations were first grown in Bogota, Colombia in 1966. Now there are over 50 firms in Bogota that exclusively produce cut carnations on more than 500 acres of land. Because intercontinental jet transportation has broadened their marketplace, this trend toward

South American production continues with cut chrysanthemums and cut roses.

Floriculture Production

Floriculture products are grown at many sites around the world. In some countries, cut flower production takes place outdoors; plant materials are also grown in greenhouses. After the flowers are harvested, they may then be packed and shipped via truck or air to wholesalers. The wholesaler may also purchase flowers from flower brokers or through auctions. In turn, wholesalers sell the flowers to retail outlets. The retail florist may also purchase plant materials directly from the local grower. The retailer then prepares the floriculture products for the customer. See Figure 1.1 for an illustration of the route taken by flowers and other plant materials from grower to consumer.

Although over 60 countries worldwide produce and export flowers, Holland, Colombia, Israel, and Italy are the dominant countries in the floriculture market. The United States is the world's largest producer of floral crops, but it does not export many plants. Holland, however, produces flowers specifically for export. Many countries ship flowers to Holland for export to the rest of the world. In the United States, California, Colorado, Ohio, Florida, and Hawaii are the largest flower producers.

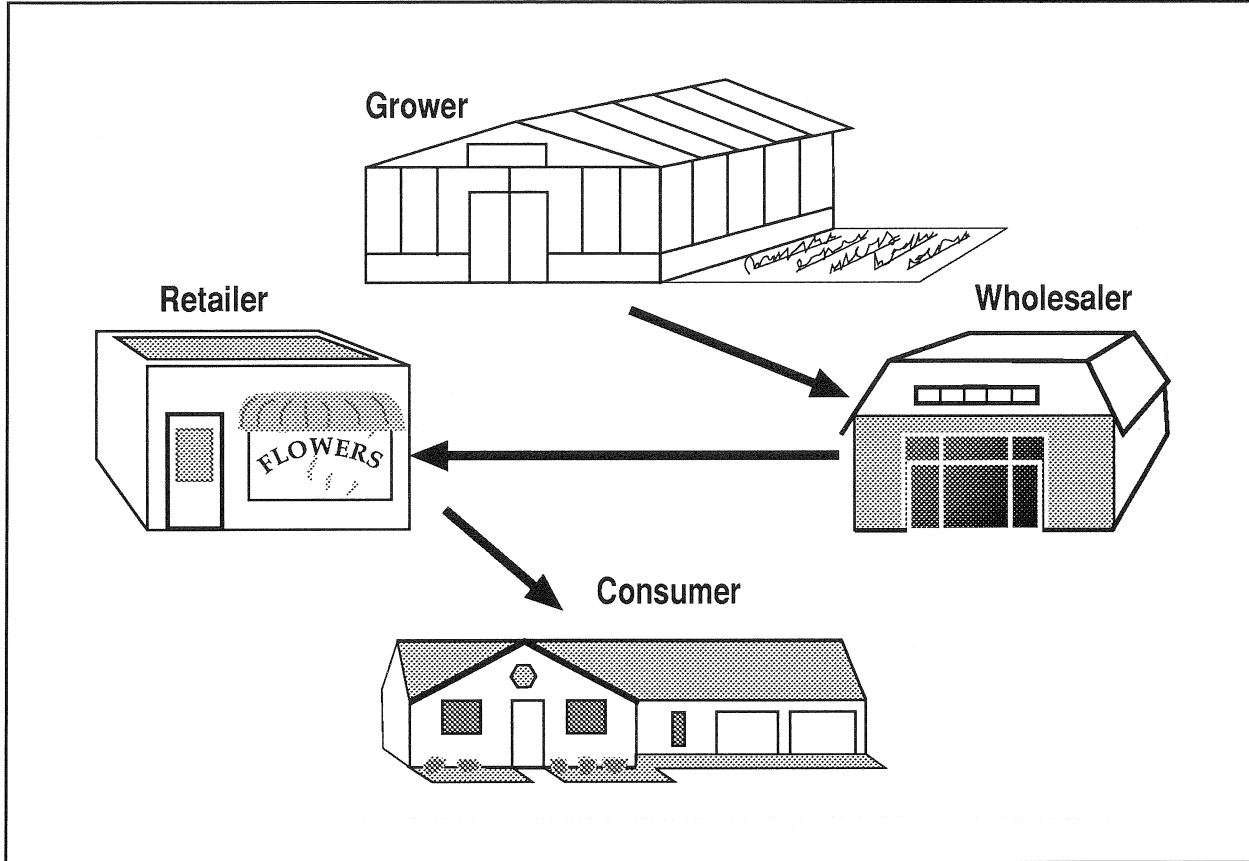
Three divisions are recognized in the floriculture industry. They include greenhouse growers, wholesale florists, and retail florists.

Greenhouse Growers

Greenhouse growers produce fresh flowering potted plants, foliage potted plants, cut flowers, and cut foliage. In Missouri, greenhouse operations are important in the production of flowering potted plants, potted foliage plants, and bedding plants. According to the *1992 Census of Agriculture*, there were 420 Missouri businesses raising foliage plants, potted plants, bedding plants, and cut flowers. Cumulatively these businesses utilized 6,981,961 square feet under glass and 164 acres in the open for the cultivation of their crops. Furthermore, these crops resulted in \$39,580,000 in sales.

Floristry

Figure 1.1 - Basic Path of Floral Products



Wholesale Florists

The wholesale florist purchases floriculture products from growers and sells them to retail florists. Wholesale florists may also purchase their products from floral brokers. Some large wholesalers have representatives at Aalsmeer, the large Dutch floral auction, to purchase and arrange for shipments of flowers. Wholesale florists may contract with local growers a year in advance for floral products needed during holiday seasons.

Retail Florists

The retail florist arranges or prepares floriculture products for sale to the general public. Because retail flower shops greatly differ, it is difficult to generalize characteristics. The following statistics were taken from the magazine *Flowers&*, January 1996.

1. Sales in the U.S. market for floral goods in 1995 are projected to total \$14.1 billion.

2. There are approximately 39,000 retail flower shops in the United States.
3. In 1995, an average of \$54.04 per capita was spent on floral goods in the United States.
4. The flower that generates the most revenue is the rose, with over 1.2 billion stems sold in 1994.
5. Eighty-two percent of major supermarkets in the United States sell plants and flowers, with 25 percent offering floral arranging services.
6. Non-florist outlets accounted for 47% of sales in the floral item market in 1995.

Evolution of Floristry Trends

Flowers have been used for decoration since ancient times. Ancient Egyptians decorated their tombs with wall paintings of flowers and flower

arrangements. The Romans used wreaths and garlands to decorate their homes. They were especially fond of very fragrant and brightly colored flowers.

During the Renaissance, people used flower symbols extensively, often associating them with religion.

The Baroque period followed the Renaissance in Europe during the 17th and 18th centuries. The Baroque style is typified by very elaborate use of curved lines and massed and very full flowers.

The Victorian era heavily emphasized colors and patterns. Flower arranging was first recognized as an art form during this period, and floral design classes were taught.

Oriental flower arranging places importance on individual flowers and plant forms. Lines and negative space are important to the design, and each flower and piece of plant material has symbolic meaning.

In the United States, the art deco style was popular during the 1920s and 1930s. This style is distinctive for its strong geometric lines and patterns. During the 1960s and 1970s, tight geometric forms became popular.

Current Trends in Floristry

Current trends in floristry are directed toward offering more services in the average florist shop. The majority of the shop's business is received through the telephone.

Grocery stores and large department stores are expanding their services, and some offer very large and active retail flower shops. Some small flower shops are also located in hotel lobbies and hospital gift shops. These shops have more cash-and-carry or walk-in trade. The recent growth in the retail flower market has been attributed to these flower markets. For convenience, customers purchase floral products where they usually shop for other items, such as food.

American attitudes about decorating with flowers are shifting toward a European emphasis. People are keeping more flowers in their homes and in more casual settings. To cater to this trend, florists will need to provide flowers that are easily available and attractively priced. In the potted plant market, for example, the trend is shifting towards providing smaller plants, usually in four-inch pots. Customers also want plants and cut flowers that require little care and will last longer.

Summary

Floristry is a division of the floriculture industry. While floriculture is the business of growing, harvesting, storing, designing and selling flowers, floristry is mainly concerned with handling and designing flowers and live plant materials. Throughout human history, flowers and flower arrangements have been used for special occasions. Today, customers are purchasing flower products from florists that are conveniently located. Customers are also demanding plants and cut flowers that will last longer and are easier to care for.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

"Floral Industry Trends." *Flowers &* Jan. 1996: 88, 90, 92, 94.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

United States. Bureau of the Census. Economic and Statistical Administration. U.S. Department of Commerce. *1992 Census of Agriculture*. Vol. 1, pt. 25. Washington: GPO, 1994.

Wells, Judith A.; Janet Anderson. *Greenhouse Operation and Management*. University of Missouri - Columbia: Instructional Materials Laboratory, 1990.

Lesson 2: Career Opportunities

In recent years, flower sales have risen dramatically. Some of this growth can be attributed to an increase in population, but people are also becoming more interested in green and growing things. Flower sales will likely continue to increase. As sales increase, knowledgeable workers will be in even greater demand in the floristry field.

Wholesale Florist Industry

A wholesale florist will purchase flowers, floral products, and supplies. They often are imported from countries all over the world. These products are then sold to the retail florist.

There are many job opportunities available at the wholesale florist level, especially in some of the larger firms. A listing of some of the major careers and their duties follows.

General manager - The general manager oversees the operation of the business. This person is responsible for hiring, firing, and managing personnel, preparing employee work schedules, setting salaries and commissions, overseeing the purchase of supplies and flowers, and keeping the profit margin in line.

Cut flower manager - The cut flower manager hires, fires, and manages personnel when the manager is absent. This person buys all cut flowers and cut greens, oversees the cutting of flowers and cleaning of coolers, and keeps perishable products moving.

Supply manager - The supply manager hires, fires, and manages personnel when the manager is absent. The supply manager buys all supplies and sees that shelves are stocked. This person coordinates all holiday shows, prepares flyers for specials and shows, oversees advertising, and informs all employees of upcoming specials and new pricing updates. The supply manager is in charge of inventory, including adding new items to the inventory, maintaining correct price structures on supplies, closing out old products, and keeping inventory in line with current trends. He or she also designs displays.

Office manager - The office manager mails out statements and invoices, writes checks, and maintains the payroll and customer credit. This person also handles accounts payable calls and makes collection calls.

Receptionist - The receptionist answers the telephone and directs calls. This person also sets up new accounts, greets customers, and answers questions.

Sales representative - The sales representative sells supplies to florists, tracks the inventory, and knows what new items have arrived.

Road sales representative - The road sales representative travels on a route to florists in a given area to visit their shops and take orders. This person also delivers orders.

Bookkeeper - The bookkeeper keeps the books of the business.

Data processor - The data processor enters data into computer files and prints out invoices for customers.

Flower packer - The flower packer packs orders to be shipped out to florists.

Delivery person - The delivery person delivers flower orders to florists in the immediate area. He or she may also care for potted plants.

General personnel - General personnel help unpack flowers, fill orders, keep the store clean (especially the coolers), rotate flowers, wash out buckets, stock shelves, and complete walk-in customer sales.

Job Skills at the Wholesale Level

Each of these occupations requires different skills. The manager and the cut flower manager need good communication skills to deal with customers and employees. They must also have excellent business management abilities and math skills and be able to maintain good customer and employee relations. The manager needs to have good leadership skills as well.

Floristry

communication skills as well. In addition, the supply manager needs to have design skills and artistic ability. The sales representative and road sales representative need to have sales ability. They should also be knowledgeable about their products, use of supplies, and plant identification.

The office manager and bookkeeper need clerical skills as well as excellent organizational skills. The receptionist needs good communication skills, especially telephone skills.

The data processor needs to have excellent data entry skills because it is essential for this person to quickly and accurately type out invoices for waiting customers.

The flower packer needs skills in handling flowers as well as making quick and efficient use of time. A wholesaler sends out the majority of their flowers in the early morning. It is imperative that florists receive their orders in good condition in time for the day's business.

The delivery person needs good driving skills and must be able to make minor repairs to delivery vehicles. Again, efficiency is essential for this job in order for deliveries arrive at their destinations as quickly as possible.

General personnel need sales skills as well as organizational skills. They are often called upon to do a variety of duties and to help out where needed.

Retail Florist Industry

A retail florist will provide a variety of products and services. Among the products offered for sale are: fresh cut flowers, flowering potted plants, foliage plants, fresh cut arrangements, balloons, and gift items. A delivery service is also usually provided. Funerals and holidays provide the largest percentage of their business, with the four biggest holidays being Valentine's Day, Secretaries Day, Mother's Day and Christmas.

In a retail flower shop, the owner is often the manager as well. If owners are unfamiliar with the floral industry, they may hire a manager, at least until they feel comfortable in running the shop. In many retail shops, employees may be trained to

do another job. For example, the floral designer might also be the sales representative for the shop.

If a manager is hired, he or she will hire and train employees, supervise designers, sales people, and delivery people, order flowers and supplies for the shop, prepare employee work schedules, price products to be sold, and oversee sales promotions and advertising. The manager may design as well.

The floral designer creates and constructs floral designs and arrangements. This person will often design displays within the shop or in the window.

A florist shop sales representative waits on customers in the store, takes telephone orders, offers advice to customers, and may package orders. This individual also unpacks and processes cut flowers and potted plants and may care for potted plants. The sales representative may design arrangements as well.

The delivery person for the flower shop delivers finished arrangements and plants to customers and may find it necessary to repair any arrangements that were damaged in delivery. The delivery person routes deliveries, checks with customers by phone to see when they will be at home to receive orders, and keeps the delivery van clean and in good running condition in order to represent the shop well. In many retail floral shops, the delivery person is also responsible for taking care of the potted plants in the shop.

The office worker sends out statements, takes care of paper work as needed, and orders supplies as approved by the manager or owner.

The bookkeeper keeps the books of the business and monitors the cash flow. This person needs to report to the manager on a regular basis concerning the financial health of the shop.

Job Skills at the Retail Level

The shop owner and manager need good business and communication skills as well as the ability to maintain employee and customer relations. The manager of the shop also needs to have good leadership skills.

The floral designer needs artistic abilities, communication skills, and sales abilities. The designer must be a fast and efficient worker.

A flower shop sales representative often needs the same skills as the floral designer. The same person often fills both roles, though some larger shops hire separate sales representatives to wait on customers and answer the telephone. The sales representative should know how to care for potted plants.

The delivery person for a retail shop needs the same skills as the delivery person for a wholesaler as well as a few other skills. The retail delivery person needs some design skills because repairs often need to be made to arrangements that were damaged in transit. This person must also keep the delivery van clean and in good working condition. Knowledge about the proper care for potted plants is needed for this position.

The office worker and bookkeeper both need organizational skills, clerical skills, and accounting skills.

Careers Related to Floristry

Career opportunities closely related to the floristry industry include interiorscaping, teaching, custom floriculture, and horticulture therapy.

Interiorscaping has been becoming more common in recent years. With the proliferation of large shopping malls, office buildings, and restaurants, the use of live green plants for interior decoration has increased. Companies often hire a person to incorporate live green plants into the design of the interior of their buildings. The interiorscaper will sometimes be in charge of maintaining these plants as well.

The teaching of floriculture has increased, even being included in junior high and high school curricula.

Custom floriculture involves florists who assist people in decorating their private homes with live and/or permanent flowers. This service is especially popular during the Christmas season.

Horticulture therapy consists of the use of horticulture to help people. This type of therapy has been highly successful with people who are physically or mentally challenged, senior citizens in long-term care facilities, and prison inmates. The therapeutic value of horticulture and working with beautiful live and growing plants should not be minimized.

Continuing Professional Development

There are many places where more professional training or continuing education can be obtained. Some of these include design shows, design schools, wire service workshops, and college courses.

Wholesale florists often hold open houses several times throughout the year. They showplace what is new to the industry and hire top designers to share new design ideas with other florists.

In addition, some schools offer concentrated courses in floral design. They will often meet for a period of several weeks in which students learn a variety of different design techniques.

Various universities offer short courses ranging from a day to a week. These classes often include a large trade show as well.

The major wire services or floral organizations hold programs and workshops. Professional organizations such as the Society of American Florists (SAF), the American Floral Marketing Council (AFMC), and the American Institute of Floral Design (AIFD) hold workshops for their members. AIFD has a very selective membership of designers who have been required to pass difficult entry requirements.

Wire services such as Florist Transworld Delivery (FTD), American Floral Services (AFS), Redbook, Telefloral, Florifax International, and Carik Services, Inc. also hold programs and workshops.

The Society of American Florists, which sponsors annual meetings, is an excellent organization for a florist to join. In Missouri, the Missouri Florist's Association holds annual meetings with well attended workshops and design competitions.

Floristry

A number of magazines are specifically targeted to the floral industry, and they often feature new designs and products.

Summary

Many career opportunities exist in the field of floristry. It is a rapidly expanding area that will provide many jobs in the future.

Credits

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Mercer, Robert J.; William J. Brown, Jr.; Gene M. Love; Richard F. Stinson. *Retail Flower Shop Operation and Management*. Vol. 9, #1s. University Park: Pennsylvania State University, 1968.

Lesson 1: Plant Botany

To identify plants, it is necessary to be able to recognize and distinguish the different plant parts and to know their functions.

Basic Plant Parts and Their Functions

The four basic parts of a plant are the root, stem, leaf, and flower (see Figure 1.1). Each part plays a specific role in the life of the plant.

The root anchors the plant to the soil or growing medium and also serves to draw water and minerals from the soil. The root then translocates the water and minerals to all of the parts of the plant above ground. Roots may be used to store food as well.

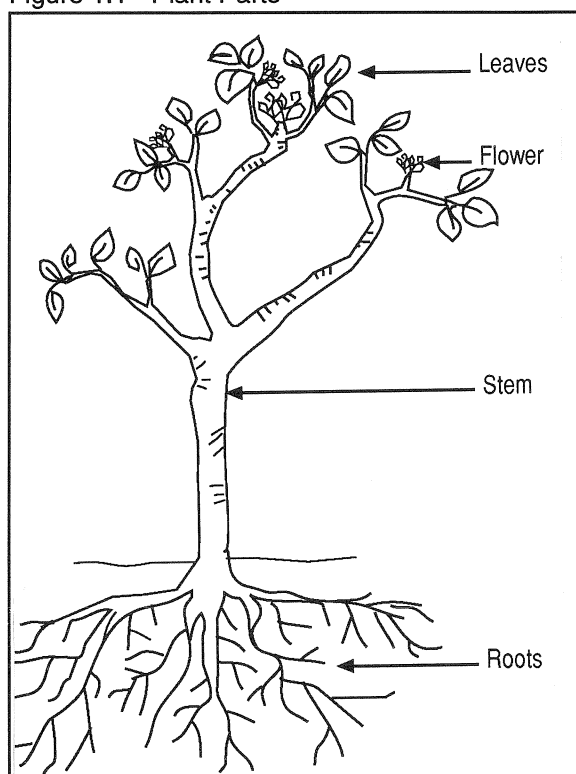
The stem holds the plant erect and helps to display the leaves to the sunlight. It translocates water, minerals, and food to the leaves and the roots. The stem also stores food. The stem is composed of two parts: the node and the internode. The node is that portion of the stem to which a leaf is attached. The internode is the portion of the stem between the nodes. Stems also have particular shapes. The geranium stem is generally round. The begonia stem is oval, and the stems of sage, salvia, coleus, and mint are square.

The leaf is the major site for photosynthesis, the production of food. Leaves are also the site for gas exchange with the atmosphere and for the storage of food. The leaf is composed of a blade, a petiole, and two stipules. The blade is the large flattened green structure often referred to as the leaf. The blade may be very large like a palm leaf, very small like the leaves of the sweet alyssum, very thick like the jade plant leaf, or completely absent like the cactus. The petiole is the “stem” of the leaf, but it is structurally different from the main stem of the plant. It too may vary in size and shape (compare the petioles of the heart-leaf philodendron and the pothos or Devil’s ivy vine) or may be completely absent, as on the jade plant. The stipules, when present, appear as two small leaf-like appendages at the base of the petiole where it is attached to the stem of the plant. Geraniums, begonias, and roses have stipules while snapdragons, carnations, and daisies do not.

The shape and thickness of the blade and petiole as well as the size and presence or absence of the stipules are very important characteristics used to distinguish and identify plants.

The flower contains the reproductive organs of the plant. The size and color of the flower serve primarily to attract pollinating insects. Once pollination and fertilization take place the flower develops into a fruit that contains seeds.

Figure 1.1 - Plant Parts



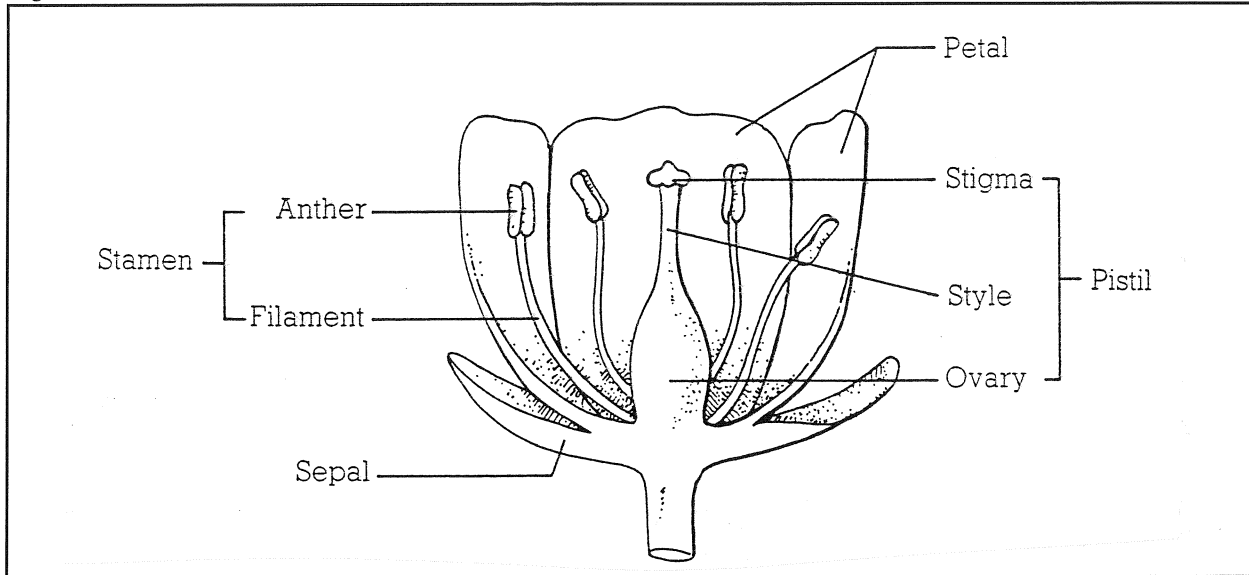
Flower Parts

Figure 1.2 shows the flower parts.

The pistil is the female part of a flower and is composed of the ovary, stigma, and style. The ovary is generally the enlarged portion at the base of the pistil. Ovaries produce ovules that, when fertilized, will develop into seeds. The stigma receives and holds the pollen grains. The style

Floristry

Figure 1.2 - Flower Parts



connects the stigma with the ovary and helps to guide the germinated pollen grain to the ovules in the ovary.

The male part of a flower is the stamen. It is composed of the anther and the filament. The anther holds the pollen, and the filament supports the anther and connects it to the flower.

The sepals and petals are vegetative (or non-sexual) parts of the flower. The sepals are the outer covering of the flower bud and are known collectively as the calyx. Sepals protect the stamen and pistil when the flower is in the bud stage. The collective term for the petals is the corolla. Petals are often brightly colored. They protect the stamen and pistil during the bud stage and attract pollinating insects.

Inflorescence Types

When a flower has more than one bloom per stem, it is called an inflorescence. The common inflorescence patterns of floral plants (Figure 1.3) are :

- solitary (ex. hibiscus, carnation)
- spike (ex. gladiolus)
- raceme (ex. snapdragon)
- panicle (ex. phlox)
- corymb (ex. candytuft)

- compound corymb (ex. throatwort)
- cyme (ex. geranium)
- compound cyme (ex. baby's breath)
- cincinnus (ex. freesia)
- scorpioid (ex. petunia)
- umbel (ex. agapanthus)
- compound umbel (ex. Queen Anne's lace)
- spadix (ex. calla lily)
- catkin (ex. pussy willow)
- head (ex. chrysanthemum, daisy)

Leaf Arrangements

Leaves are arranged on the stems in various ways. The three basic leaf arrangements are alternate, opposite, and whorled (Figure 1.4).

Figure 1.4 - Basic Leaf Arrangements

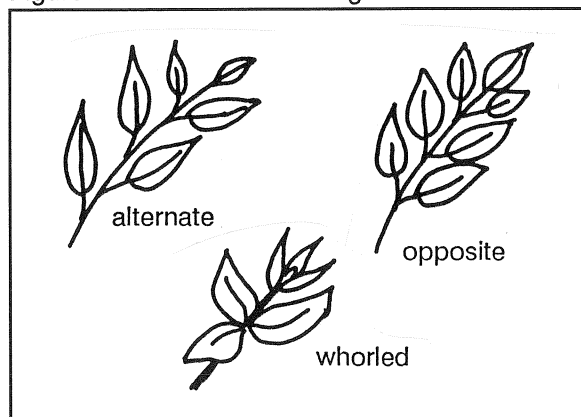
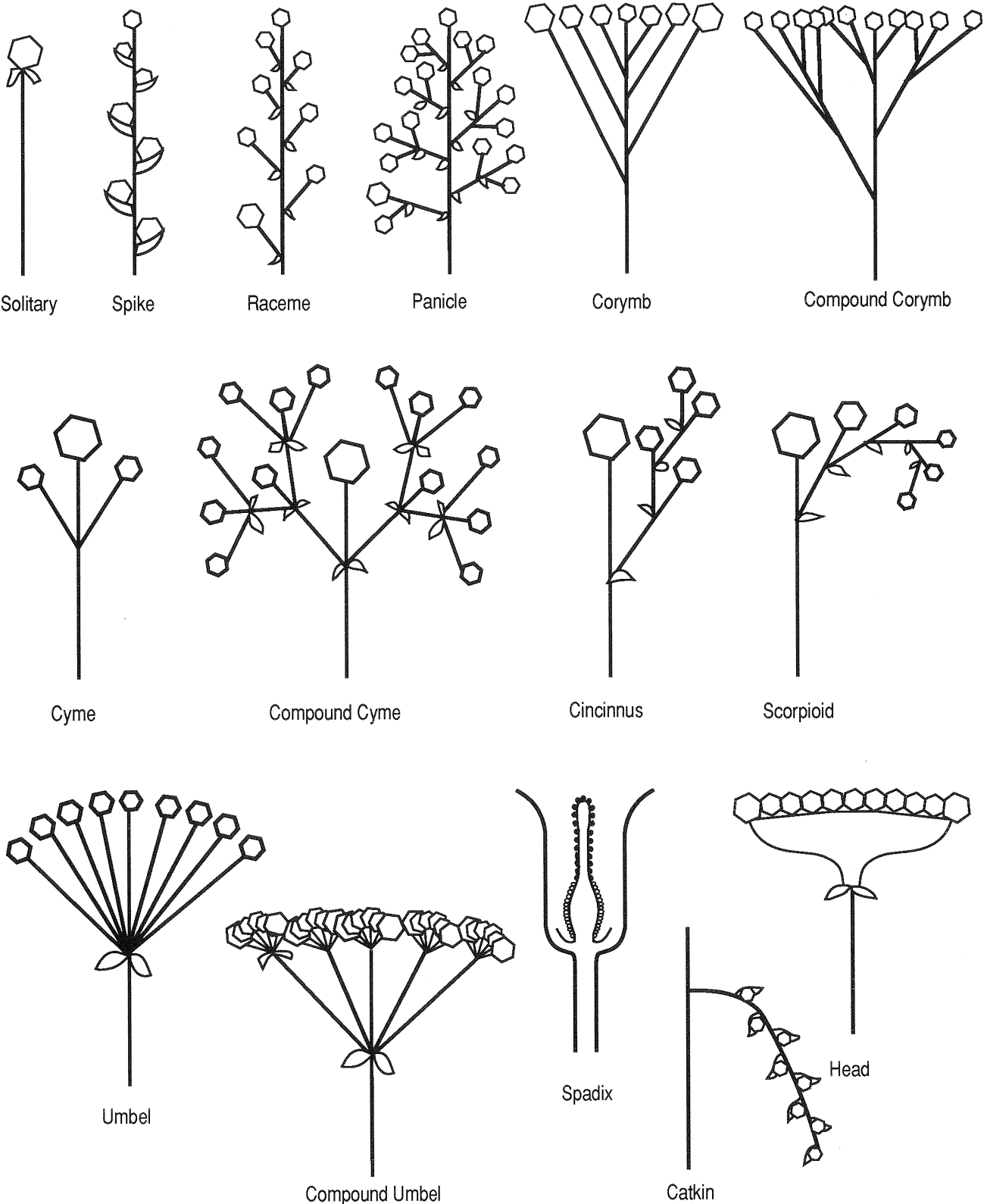


Figure 1.3 - Inflorescence Types



Floristry

When only one leaf is attached to any one node of the stem the leaf arrangement is said to be alternate. Roses are a good example of a plant commonly used by florists that has alternate leaf arrangement.

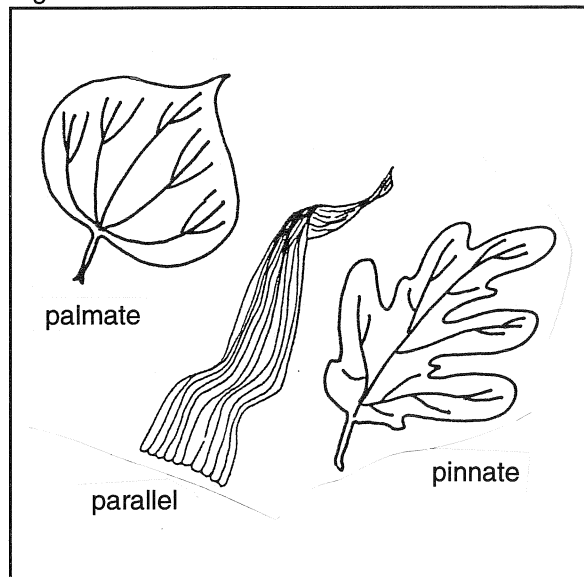
When two leaves are attached to a node the leaf arrangement is opposite. Carnations, for example, have opposite leaves.

When three or more leaves are attached to any one node in a whorl or circle around the stem, the leaf arrangement is said to be whorled. Lemon verbena and sweet woodruff have whorled leaves.

Venation Types

The patterns of the veins on leaf blades are referred to as venation. The three major types of venation are palmate, parallel, and pinnate (Figure 1.5).

Figure 1.5 - Leaf Venation



In palmate venation the veins are spread out from the base of the leaf in a shape that resembles the palm of the hand with the fingers spread. Galax, which is one of the more common types of cut green foliage, has leaves with palmate venation.

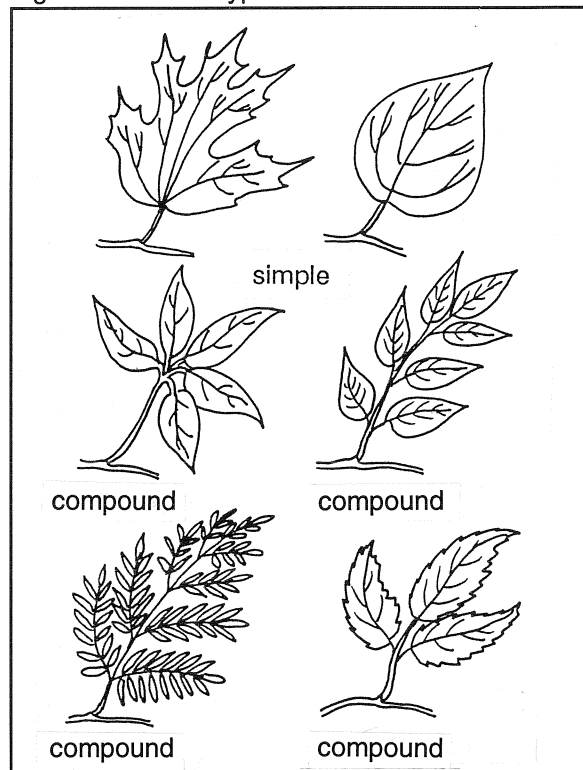
In parallel venation the veins on the leaf are parallel to each other. The lily is a frequently used cut flower with parallel venation.

Pinnate venation has one main vein running the length of the blade of the leaf with side veins branching off of it. A good example of a plant with pinnate venation is salal or lemonleaf.

Leaf Types

Leaf types may be either simple or compound (Figure 1.6). A simple leaf has only one blade. If a leaf has more than one blade, it is known as a compound leaf. The smaller blades that make up the compound leaf are called leaflets. Rose leaves are compound leaves.

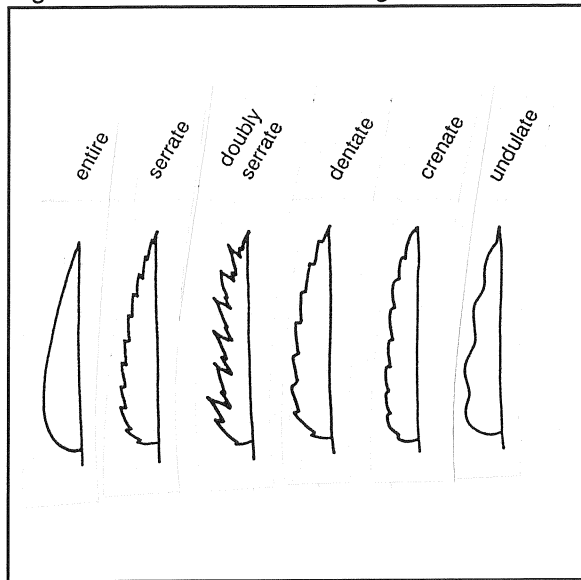
Figure 1.6 - Leaf Types



Common Leaf Margins

The very edge of the blade is called the margin. Some of the common margins are entire, undulate, serrate, doubly serrate, dentate, and crenate (Figure 1.7).

Figure 1.7 - Common Leaf Margins



Annuals, Perennials, and Biennials

Plants that come up from seed, bloom, set seed, and die in one year are referred to as annuals. A good example of an annual is the cineraria. Some plants are grown as annuals, but they are not TRUE annuals and can be referred to as tender perennials. These plants would continue growing

if they were brought inside from the elements. Geraniums are tender perennials.

A perennial is a plant that comes up year after year, usually dying back to the ground and regenerating from the base.

A biennial comes up from seed, grows for a year, dies back, and blooms the second year.

Summary

Higher plants are very complex, and their roots, stems, leaves, and flowers vary greatly. The large and sometimes subtle differences between these plant parts are used to differentiate and identify plants.

Credits

Wells, Judith A.; Janet Anderson. *Greenhouse Operation and Management*. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Rodekohr, Sherie; Debi Waeckerle. *Landscaping and Turf Management*. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Lesson 2: Identifying Plants

Workers in a flower shop need to know the names of the plant materials they work with. Customers will expect employees to be familiar with the uses of plants and cut flowers and how to care for them.

Plants Used in Floristry

The plants that a florist uses are divided into four basic groups: cut flowers, cut foliages, flowering potted plants, and potted green plants or foliage plants. Some florists also sell bedding plants in the spring.

Plant Names

A plant may have many common names, some peculiar to a particular region. Common names are often confusing because two different plants may have the same common name. For example, several different plants have the common name of creeping Charlie.

Carolus Linnaeus, a Swedish botanist, developed a two-name system for naming plants. He gave all plants two Latin names as their scientific name. The first part of the scientific name is known as the genus or generic name. All the plants that have the same generic name belong to the same genus. These plants are all closely related to each other and share common characteristics.

The second name he gave plants is the species or specific name. All plants of the same species look

almost exactly alike. Within a species, plants are often broken down into varieties. The variety name is called a cultivar, or cultivated variety.

The generic name is usually a noun. The generic name is sometimes given to honor an early botanist. In a number of cases, the generic name has come to be the common name, as is the case with the eucalyptus plant, whose generic name is *Eucalyptus*.

The species name is an adjective. The species name is often a description of some characteristic of the plant or gives geographical information about where the plant occurs naturally.

Plants that are related and have similar flower structures are grouped into families. The Asteraceae (daisy) family is the largest of all plant families.

When scientific names are written, they are either underlined or in italics. The generic name is always written first and begins with a capitalized letter. The species name is last and begins with a lowercase letter. For example, the scientific name for the cut flower commonly known as the carnation is *Dianthus caryophyllus*.

Taxonomists are scientists who identify and classify plants.

Cut Flowers

Listed in Table 2.1 are some of the cut flowers commonly found in flower shops.

Table 2.1 - Common Cut Flowers

Scientific Name	Common Name(s)	Color(s)	Availability	Unit	Special Notes
<i>Alstroemeria aurantiaca</i>	alstroemeria lily, Peruvian lily	pink, yellow, orange, white, lavender	year-round	bunches of 10 stems	not usually one color, but will have spots or flecks of another; very ethylene sensitive

Floristry

Scientific Name	Common Name(s)	Color(s)	Availability	Unit	Special Notes
<i>Anthurium andraeanum</i>	anthurium, flamingo lily	white, red, pink, orange	year-round	25 stems or single	storage in low temperatures may cause bracts to turn black; ideal storage temperature is above 45°F
<i>Antirrhinum majus</i>	snapdragon	pink, yellow, white, purple, orange, red, burgundy	year-round	bunch of 10 stems	good line flower; very ethylene sensitive
<i>Astilbe x arendsii</i>	astilbe	white, pink, red	March through December	10 stems	used as a filler flower; requires lots of water; dries well
<i>Callistephus chinensis</i>	China aster	light and dark pink, white, blue, lavender	summer	bunch of 10	often used as mass flowers
<i>Cattleya</i>	cattleya orchid hybrid	purple and white with yellow or purple throat	year-round	singly	very long lasting; some are fragrant; used for corsages
<i>Celosia cristata</i>	cockscomb	red, yellow, pink, orange	year-round	10 per bunch	long lasting and dry easily
<i>Chamelaucium uncinatum</i>	waxflower	white, purple, lavender, pink	December through May	bunch	good filler flower; ethylene sensitive
<i>Cymbidium</i>	cymbidium orchid	yellow, pink, white	year-round	singly or spray	long-lasting; good corsage flower
<i>Delphinium elatum</i>	delphinium	white, blue	spring, summer	bunch of 10	has a tendency to drop florets; good line flower in an arrangement
<i>Dendranthema frutescens</i>	Marguerite daisy	white, yellow	year-round	25 stems	flowers last longer than foliage; remove foliage before arranging

Unit II - Plant Identification

Scientific Name	Common Name(s)	Color(s)	Availability	Unit	Special Notes
<i>Dendranthema x morifolium</i>	florist's chrysanthemum, pompon mum, football mum, fuji mum, spider mum	yellow, purple, lavender, bronze, white	year-round	singly or 10 stems per bunch	will shatter easily; used for funerals and large arrangements
<i>Dendrobium</i>	dendrobium	white, purple	year-round	in sprays of 10 stems	used for corsages; good wedding flower
<i>Dianthus caryophyllus</i>	carnation	pink, red, white, purple, yellow, orange (can be purchased in blue and green if stem dyed)	year-round	bunch of 25 stems	long-lasting flower; very versatile, used in arrangements and corsages
<i>Dianthus caryophyllus nana</i>	miniature carnation	pink, red, white, purple, yellow	year-round	bunch	long-lasting and versatile
<i>Erica carnea</i>	spring heather	pink, lavender, white	winter, spring	bunch	used as a filler flower
<i>Freesia x hybrida</i>	freesia	yellow, white, lavender, pink	winter, spring	10 stem bunch	often used for wedding bouquets
<i>Gardenia jasminoides</i>	gardenia	white	year-round	box of 3	VERY fragrant, but have a tendency to discolor or bruise easily; used for wedding bouquets and corsages
<i>Gerbera jamesonii</i>	gerbera daisy, Transvaal daisy	pink, white, orange, red, peach, yellow	year-round	singly	may need to wire stems to keep them from twisting
<i>Gladiolus x hortulanus</i>	garden gladiolus	red, yellow, white, purple, pink, blue	year-round	bunch of 10 stems	tips may need to be snapped out; order early so they will be open good line flower for arranging

Floristry

Scientific Name	Common Name(s)	Color(s)	Availability	Unit	Special Notes
<i>Gypsophila elegans</i>	baby's breath	white is the most popular color, although it also comes in pink	year-round	bunch	a mainstay in the florist shop, used as filler in arrangements, corsages, and wedding designs
<i>Hyacinthus orientalis</i>	hyacinth	blue, white, pink, lavender, yellow	November through April	5 stems per bunch	very fragrant; work well in spring arrangements; individual florets used in corsage work
<i>Iris x xiphium</i>	Dutch iris	dark blue, light blue, white, yellow	year-round	bunches of 10	order early so buds can open; ethylene sensitive
<i>Leucanthemum x superbum</i>	shasta daisy	white	year-round	singly	have a tendency to shatter if a few petals fall out
<i>Liatris spicata</i>	liatris, blazing star	lavender, white	year-round	bunches of 10 stems	good line flower
<i>Lilium sp.</i>	Oriental lily, stargazer	pink, white, white with pink markings	year-round	bunch of 5 or 10	be sure to remove anthers, since they stain the petals badly when they open
<i>Lilium hybridum</i>	Asiatic lily	red, yellow, white, pink, orange	year-round	10 per bunch	be sure to remove anthers, since they stain the petals badly when they open
<i>Limonium sinuatum</i>	statice	purple, mauve, white, yellow, blue	year-round	bunch	very long lasting; good filler flower
<i>Matthiola incana</i>	flowering stock	purple, white, pink, peach, lavender	January through October	10 stems per bunch	good line flower; very fragrant

Unit II - Plant Identification

Scientific Name	Common Name(s)	Color(s)	Availability	Unit	Special Notes
<i>Narcissus pseudonarcissus</i>	daffodil	yellow, white, ivory	winter, spring	10 stems per bunch	do not store with other flowers immediately after arrival because sap will be released which will shorten the vase life; sap release ends after about 6 hours
<i>Paeonia lactiflora</i>	peony	pink, red, white, bi-colors	May through July	10 stems per bunch	petals shatter easily once flowers are fully open
<i>Paphiopedilum x hybrid</i>	lady slipper orchid	green, yellow, brown, burgundy, white	year-round	individually or 10 stems per bunch	water can cause spotting on petals; used for corsages and weddings
<i>Phalaenopsis</i>	phalaenopsis (butterfly) orchid	white, purple	year-round	singly	used for corsages and wedding work
<i>Polianthes tuberosa</i>	tuberose	white	spring, summer, fall	bunches of 10 stems	very fragrant; best used in corsage and wedding designs
<i>Protea sp.</i>	protea	white, purple, pink, orange	year-round	singly	dramatic and unusual flower
<i>Rosa x hybrida</i>	sweetheart rose, floribunda rose	red, pink, lavender, white, yellow, peach, orange, bi-colors	year-round	bunches of 25 stems	smaller than the hybrid tea rose but longer lasting
<i>Rosa x hybrida</i> , Class Hybrid Tea	hybrid tea rose	red, pink, lavender, white, yellow, bi-colors, peach, orange	year-round	bunches of 25 stems	most popular of all flowers
<i>Stephanotis floribunda</i>	stephanotis	white	year-round	box of 25 stems	very fragrant; must wire individual florets or use special stephanotis stems

Floristry

Scientific Name	Common Name(s)	Color(s)	Availability	Unit	Special Notes
<i>Strelitzia reginae</i>	bird of paradise	orange	year-round	singly	dramatic tropical flower
<i>Tagetes sp.</i>	marigold	yellow, orange, and gold	May through October	10 stems per bunch	used in mixed summer arrangements
<i>Tulipa hybrid</i>	tulip	red, pink, white, yellow, purple, orange, bi-colors	spring, winter	10 stems per bunch	stems will grow as much as 2" when cut
<i>Zinnia elegans</i>	zinnia	yellow, red, orange, white, pink, lavender	May through October	10 stems per bunch	may need to be wired for use in arrangements since the stem is hollow just below the flower

Cut Foliages

In addition to cut flowers, cut foliages are also important to the florist trade. They are greens that

have been selected mainly for their longevity as cut plants. Table 2.2 is a listing of some of the more popular cut foliages.

Table 2.2 - Popular Cut Foliages

Scientific Name	Common Name	Availability	Unit	Special Notes
<i>Asparagus asparagoides</i>	smilax	year-round	6 strings per bag	need to keep in a plastic bag
<i>Asparagus densiflorous</i> 'Sprengeri'	sprengeri, asparagus fern	year-round	bunch	often has thorns; good filler foliage
<i>Asparagus macowanii</i>	Ming fern	year-round	bunch	delicate filler foliage
<i>Asparagus setaceus</i>	plumosa fern	year-round	bunch	light and feathery foliage
<i>Asparagus virgatus</i>	tree fern	year-round	bunch	good filler foliage for roses in dozens
<i>Buxus sempervirens</i>	boxwood	year-round	bunch	must be stored in water
<i>Camellia japonica</i>	common camellia	year-round	bunch	has very shiny, dark green leaves

Unit II - Plant Identification

Scientific Name	Common Name	Availability	Unit	Special Notes
<i>Chamaedorea sp.</i>	jade	year-round	25 stems per bunch	needs to be kept in moist box; has a broader leaf than the emerald
<i>Chamaedorea sp.</i>	emerald	year-round	25 stems per bunch	lasts well; best used as background for large arrangements
<i>Cordyline terminalis</i>	ti leaf	year-round	10 stems per bunch	easy to shape leaves for special effects; good for background foliage
<i>Cytisus scoparius</i>	Scotch broom	year-round	bunch	easy to bend into curves
<i>Eucalyptus polyanthemos</i>	silver dollar gum, eucalyptus	year-round	1½ pound bunch	strongly medicinal-scented eucalyptus foliage may be used fresh or in dried arrangements, after being preserved in glycerine and water
<i>Galax urceolata</i>	galax	year-round	25 stems per bunch	covers floral foam well
<i>Gaultheria shallon</i>	salal, lemonleaf	year-round	bunch	used for funeral designs and large arrangements
<i>Hedera helix</i>	English ivy	year-round	bunches	young growth lasts best if sprayed with a sealant; often used for bridal bouquets
<i>Lycopodium sp.</i>	lycopodium, princess pine, club moss	year-round	10 per bunch	striking, somewhat stiff line foliage
<i>Myrtus communis</i>	myrtle	year-round	bunch	small leaves; good for helping to establish lines in arrangements
<i>Nephrolepis exaltata</i>	Boston fern, sword fern, flat fern	year-round	25 per bunch	used in funeral work
<i>Pittosporum tobira</i>	pittosporum	year-round	bunch	good filler foliage; may be varigated
<i>Podocarpus macrophyllus</i>	podocarpus, yellow podocarpus	year-round	bunch	also called yew podocarpus because it looks like yew
<i>Rumohra adiantiformis</i>	leatherleaf fern, baker fern	year-round	25 stems per bunch	probably the most commonly used cut green foliage

Floristry

Scientific Name	Common Name	Availability	Unit	Special Notes
<i>Ruscus sp.</i>	ruscus	year-round	bunch	Italian ruscus, a finer foliage, is more popular for arranging
<i>Vaccinium ovatum</i>	florist's "huckleberry"	year-round	bunch	good foliage for large arrangements
<i>Xeropyllum tenax</i>	bear grass	year-round	bunch	long, graceful stalks add movement to an arrangement

Flowering Potted Plants

In addition to fresh arrangements, florists also sell flowering potted plants, usually as gifts. Some are available only during special seasons of the year

(for example, poinsettias are sold for Christmas and Easter lilies for Easter), while others are available year-round. A flower shop employee must be able to identify the more popular flowering potted plants. Table 2.3 lists some common flowering potted plants.

Table 2.3 - Common Flowering Potted Plants

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Ageratum houstonianum</i>	ageratum	grows from 6" to 24" tall in compact mounds; fluffy, tufted blossoms may be lavender, white, or pink, but they are usually a blue color	does best in full sun with average soil; a common garden flower
<i>Begonia x semperflorens-cultorum</i>	wax begonia	mounded form; available in bronze or green leaf forms; single or double blooms in white, pink, or red	requires medium light, humidity, and moisture
<i>Begonia x tuberhybrida</i>	tuberous begonia	giant double begonias may resemble camellias or carnations; white, pink, red, yellow, or orange flowers	grows well in low light
<i>Calceolaria crenatiflora</i>	pocketbook plant	has a profusion of brightly colored blooms that resemble a pouch or lady's pocketbook; red, yellow, and orange flowers	needs medium light, humidity, and moisture
<i>Catharanthus roseus</i>	vinca, Madagascar periwinkle	flower colors include pure white, white with red eye, rosy pink, and pink with rose eye	needs minimal care; garden flower

Unit II - Plant Identification

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Clematis x Jackmanii</i>	clematis	vining plant that can reach 8' to 10' in height; brittle stems; large flowers that are white, pink, red, light blue, dark blue, and white/pink bicolor	likes high to medium light; perennial border vine
<i>Coleus x hybridus</i>	coleus	grown for its very colorful leaves; flowers are not significant	should be protected from full sunlight; keep soil slightly moist; garden plant
<i>Cyclamen persicum</i>	florist's cyclamen	has heart-shaped leaves that are dark green with light green blotches around the edge; relaxed petals on long stems rising above leaves; white with a pink center or "eye", solid white, pink, red, lavender, or purple in color	requires a nighttime temperature of 65°F or less and bright light
<i>Dendranthema x morifolium</i>	florist's chrysanthemum	flowers are all colors except blue; most popular potted plant	requires medium light, humidity, and moisture
<i>Euphorbia pulcherrima</i>	poinsettia	red, pink, white, and marbled colorful bracts surround yellow "true flowers"	needs bright light, with medium humidity and moisture
<i>Exacum affine</i>	German (Persian) violet	maximum height of 2' or less; small leaves; mass of small blue, purple, or white flowers with yellow stamens and a delicate fragrance	requires medium light, humidity, and moisture
<i>Hemerocallis</i>	day lily	leaves are long and strap-like; flowers are large and trumpet-shaped; flowers are red, pink, maroon, lavender, purple, orange, melon, yellow, pastels, and bicolors	most varieties grow best in full sun; common garden perennial
<i>Hibiscus rosasinensis</i>	hibiscus	shrubby plant with large, glossy green leaves; single or double flowers; single flowers are funnel-shaped with a long, pronounced stamen; red, pink, yellow, orange, or white flowers	needs bright light, low humidity, and medium moisture
<i>Hippeastrum x hybridum</i>	amaryllis	has large strap-like leaves; produces as many as four to six huge (5" to 9" across) lily-like flowers in clusters; may be red, white, pink, or salmon in color	needs medium humidity, bright light, and high moisture

Floristry

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Hydrangea macrophylla</i>	French (florist's) hydrangea	woody, shrub-like stems; green, glossy leaves with distinct veins; large, rounded flower heads, often 5" to 8" wide, composed of many four-petaled flowers that are blue, pink, or white in color; colors of blue or pink depend on acidity of the soil	likes LOTS of water; needs bright light and high humidity
<i>Impatiens wallerana</i>	impatiens	waxy, deep green leaves; single or double flowers may be white, purple, pink, orange, salmon, and red	grow best in full sun and prefer well-drained soil; garden flower
<i>Kalanchoe blossfeldiana</i>	kalanchoe	succulent foliage with strong, compact growth; large bunches of flowers that are orange, red, pinks, or yellow in color	requires bright light and medium humidity and moisture
<i>Lilium longiflorum</i>	Easter (trumpet) lily	tall single stem; green, strap-like leaves with parallel venation; large, white trumpet-shaped blooms at top of stem, often 3 to 5 blooms per stalk	needs bright light, high humidity, and medium moisture; best to remove the stamens as they will discolor the trumpet
<i>Lobularia maritima</i>	sweet alyssum	plants are short (up to 8" tall) and spreading (up to 12" across); plants are covered with tiny fragrant flowers that smell like honey; flowers may be rose, white, pink, or purple	likes full sun; keep well watered until blooms appear; garden flower
<i>Pelargonium x domesticum</i>	regal (Lady Washington) geranium	foliage edged with pointed teeth; very showy blooms, usually up to 2½" in diameter, with a dark blotch; white, pink, lavender, and wine red flowers	require cool temperatures to bud
<i>Pelargonium x hortorum</i>	(zonal) geranium	round-shaped leaves, sometimes with rings or "zones;" white, pink, salmon, or red flowers	hardy; prefer full sun and tolerate heat and humidity; remove old flowers for best growth
<i>Pelargonium peltatum</i>	ivy geranium	ivy-shaped leaves; trailing growth habit (good for hanging baskets); flower colors include pink (single and double blooms), red, lavender, and white with red edge	requires good light but does better without direct sun; do not over water

Unit II - Plant Identification

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Petunia x hybrida</i>	common garden petunia	can grow up to 12" tall; flowers are possible in many colors and color combinations and may be plain-edged or ruffled	likes full sun; garden flower
<i>Primula malacoides</i>	fairy primrose	rounded leaves, in rosettes; flower clusters with very fragrant 1½" blooms in purple, lavender, pink, mauve, or white	best to discard after blooming, because it is difficult to rebloom; prefers cooler temperatures (not over 80°F)
<i>Primula x polyanthus</i>	primrose, primula (polyanthus)	long strap-shaped leaves grow in a low rosette 10" to 12" across; flowers rise from the center of the rosette; yellow, orange, maroon, blue, white, or red flowers; some flowers have a yellow eye	does best at cooler temperatures (not to exceed 70°F), with bright indirect light and good soil moisture; can rot easily
<i>Rhododendron sp.</i>	azalea	small shrub (up to 18" tall); one-inch long, dark green, egg-shaped leaves; funnel-shaped flowers at the end of the stems; white, red, or pink in color	water often--will not tolerate drying out; needs high humidity and bright light; keep at as cool a temperature as possible
<i>Saintpaulia ionantha</i>	African violet	short stem topped by a rosette of round or partially oval leaves with a "hairy" surface; white, blue, purple, pink, and red flowers	requires bright light (without direct sun), high humidity, and medium moisture; will thrive under florescent lights
<i>Salvia splendens</i>	salvia	bushy plants have long, dense flower spikes; veins of leaves are indented and leaf margins are somewhat toothed, but not sharp; flower colors include brilliant red, rose, pink, salmon, lilac, violet, purple, and white	grows well in full sun; garden flower
<i>Schlumbergia bridgesii</i>	Christmas cactus	segmented leaves with rounded margins; has orange, white, red, and bright pink blooms at the end of the stem	prefers cooler temperatures, filtered light, high humidity, and evenly moist soil; to rebloom, provide cool (55°F) nighttime temperatures or short days (9 hours) from mid-September to mid-October to flower 2½ months later

Floristry

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Schlumbergia truncata</i>	Thanksgiving cactus, crab (claw) cactus	densely branching, mainly pendent stems with thin, flat, medium green segments 1½" long with a prominent green rib; white, pink, red, or orange blooms at the end of the stem	should not be exposed to full summer sunlight; needs high humidity and medium moisture; must have short days in order to bloom
<i>Senecio cineraria</i>	dusty miller	grown for its foliage, large, coarse leaves that are silvery-white in color; daisy-like flowers	prefers cool temperatures; needs medium light and moisture and high humidity; garden flower
<i>Senecio x hybridus</i>	florist's cineraria	many long-lasting, bright-colored and bicolored flowers, in blue, white, pink, or magenta and often with contrasting eyes, cover the top of the plant	easy to grow; prefers a cool environment
<i>Sinningia speciosa</i>	gloxinia	may have single or double flowers; has profuse large, open, bell-shaped flowers above thick, velvety foliage; jewel-like red, purple, white, or pink blooms	keep evenly moist and shaded from direct sunlight; needs low humidity
<i>Solanum pseudocapsicum</i>	Jerusalem cherry	shrub with dark to mid-green leaves; white flowers and small bright orange/red fruit; fruit ripen through green to yellow to orange/red and are not edible	grow best in bright indirect light and cooler temperatures (around 65°F); do not keep too wet
<i>Viola x wittrockiana</i>	pansy	5-petaled flowers in a wide range of colors with or without "face markings"	keep soil moist and well-drained; likes full sun to partial shade; garden flower

Potted Foliage Plants

In addition to flowering potted plants, most florists also offer potted foliage plants for sale. Some customers prefer a green plant because it will last longer than the flowering potted plant or cut flower

arrangement. Green plants may be sold individually, with some larger ones as specimen plants, or they may be planted in groups as in dish gardens. Table 2.4 lists common potted foliage plants.

Unit II - Plant Identification

Table 2.4 - Common Potted Foliage Plants

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Aechmea chantinii</i>	bromeliad	leaves are gray-green with silvery white crosswise stripes that originate at the center of the plant; leaves can be up to 18" in length; flowers rise from the center and are long-lasting	prefers full sunlight, a temperature of around 60°F, and high humidity; should be watered thoroughly, but given time to dry between waterings
<i>Araucaria heterophylla</i>	Norfolk Island pine	resembles a small pine tree	needs good light in order to keep its symmetrical growth habit
<i>Aglaonema commutatum</i>	aglaonema, Chinese evergreen	upright growing with waxy-green leaves that are oval and taper to a point; some varieties are variegated and have narrower leaves than the green variety; as the lower leaves get old and drop off, the stems resemble bamboo canes	one of the best plants for growing in low light; requires medium humidity and moisture
<i>Aphelandra squarrosa</i>	zebra plant	dark shiny green leaves with prominent ribs and veins of ivory.	bright light is best, but no direct sun; should be watered well, then allowed to dry slightly
<i>Brassaia actionophylla</i>	schefflera, umbrella plant	leaves radiate from a central point, which causes the plant to resemble an umbrella; oval-shaped leaves are light green and shiny; becomes a large plant under the right conditions	prefers bright, but not direct, sunlight; needs medium humidity and high moisture; susceptible to spider mites and should be checked regularly for this pest
<i>Caladium x hortulanum</i>	fancy-leaved caladium	produces red, pink, white, green, or multi-colored leaves	grows best with warm temperatures and ample water
<i>Chamaedorea elegans</i>	parlor palm	graceful, umbrella-like form looks like a small palm tree; maximum height is 3'; grows very slowly	does best in a warm location with high humidity and filtered sunlight; needs medium moisture

Floristry

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Chlorophytum comosum</i>	spider plant	long drooping leaves with runners that extend from the center with little plants on the end of them which are easily started into new plants (good hanging plant); can be either solid green, green with a white stripe down the middle of the leaf, or green with the leaves edged in white	tolerates low light, but does better with medium light; needs to be kept well watered; requires medium humidity
<i>Cissus rhombifolia</i>	grape ivy	good plant for hanging baskets; leaves resemble grapevine leaves	needs medium light, humidity, and moisture for best growth
<i>Codiaeum variegatum pictum</i>	croton	very brightly colored foliage plants with colors ranging from bright red to yellow	should receive at least 5 hours of sunlight a day for best growth; needs medium humidity and moisture
<i>Crassula argentea</i>	jade plant	thick succulent leaves are rounded and on rubbery upright stems	tolerates low light levels, but will not tolerate overwatering
<i>Dieffenbachia maculata</i>	spotted dumb cane	calcium oxalate in the sap can cause the throat and mouth to swell so that one is unable to talk; single-stemmed plant that can reach a height of 6' to 8'; large leaves have prominent veins; may have spots on the leaves or leaves that are almost completely yellow with an edging of dark green	grows best in a sandy soil containing peat moss; soil should not be kept too moist, because the plant is subject to stem rot; needs medium light and humidity
<i>Dracaena cincta</i>	red edge dracaena, Madagascar dragon tree	eventually becomes a large plant; leaves are dark green edged with red, long, and pointed on the end	tolerates low light, but needs constant moisture and warm temperatures
<i>Dracaena fragrans</i> 'Massangeana'	corn plant dracaena	long, light yellow-green leaves with stripes of whitish yellow that give the look of a corn plant; eventually becomes a large plant	tolerates low light; requires constant moisture and warm temperatures

Unit II - Plant Identification

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Echinocactus</i> <i>sp.</i>	barrel cactus	stems are globular, but will get taller as it grows older; does not flower until it is 3 years old; has trumpet shaped blooms	needs a winter rest below 50°F to promote flowering; while resting, water only enough to keep the soil from getting too dry; needs intense lighting; over watering should be avoided
<i>Epipremnum</i> <i>aureum</i>	golden pothos, devil's ivy	very popular houseplant for hanging baskets and totem poles with green leaves that resemble the philodendron but that are lighter green in color and often flecked with yellow; good climber	requires medium light, humidity, and moisture for best growth
<i>Euphorbia</i> <i>splendens</i>	crown-of-thorns	stems are brown with thorns on all sides; leaves are bright green, from 2" to 2½" long near the growing tips; flowers are in clusters with bright red or yellow bracts	full sun and warm temperatures are required
<i>Ficus benjamina</i>	Benjamin fig, weeping fig	pointed, shiny stems that arch; grows to be a tree in the tropics, but is used as a large indoor plant at four to six feet	prefers bright, indirect light; needs medium humidity and moisture; often drops its leaves if conditions are not ideal
<i>Ficus elastica</i> 'Decora'	'Decora' rubber plant, rubber tree	becomes quite a large plant	grows best in medium light; drops leaves if light is too low; tolerates low humidity but does best in medium humidity and moisture
<i>Ficus pumila</i>	creeping fig, rubber plant	very small climbing or creeping plant with heart shaped leaves that are less than 1" long; often grown as a trailing plant or ground cover	needs medium light, humidity, and moisture; must NEVER be allowed to dry out
<i>Fittonia</i> <i>verschaffeltii</i>	nerve plant	dark green leaves with veins of red, pink, or white	prefers warm temperatures, high humidity, and good light, but no direct sun; roots should be kept moist, but not too wet
<i>Gynura</i> <i>aurantiaca</i> 'Sarmentosa'	purple passion plant, velvet plant	vining plant with soft purple velvet leaves	needs a 65°F nighttime temperature, bright light, and evenly moist soil

Floristry

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Heptapleurum arboricolum</i>	dwarf schefflera, dwarf octopus tree	similar in general form to the larger schefflera, but is much smaller and more compact, with darker green and smaller leaves; long, thick leaflets radiate from a central point	requires bright light but no direct sun
<i>Hoya carnosa</i>	wax plant	vining plant with thick, waxy leaves	needs medium humidity and moisture; tolerates low light, but needs more light in order to bloom; does not like to be moved; should be kept cooler and drier in winter
<i>Justicia brandegeana</i>	shrimp plant	flower spikes droop and look like shrimp; leaves are 1" to 3" long, oval, and slightly hairy	needs to be kept trimmed to maintain a compact growth habit; prefers bright light with some direct sun and a temperature of around 65°F; do not overwater--the top two-thirds of the soil should be allowed to dry out between waterings
<i>Maranta leuconeura kerchoviana</i>	prayer plant	green leaves with brown spots up the mid-rib; has the unusual habit of the leaves closing upright at night	requires medium light and high humidity; soil should be kept moist, but allowed to dry between waterings
<i>Monstera deliciosa</i>	cutleaf philodendron, Swiss cheese plant	very large, dark green leaves that are split	requires medium light, humidity, and moisture; grows best with a nighttime temperature of 65°F
<i>Neoregelia carolinae</i> 'Tricolor'	tricolor blushing bromeliad	leaves originate from a center in a rosette shape; when flowering, the center will change color, usually to a brilliant red, for 2 to 3 months	requires bright light with some direct sun and high humidity; rosette does best when filled with water; drain water and add fresh once a month
<i>Nephrolepis exaltata</i>	Boston fern	fronds up to three feet long; fluffy ruffles, a variety, has dense curling leaflets; hanging plant	requires medium light and high humidity and moisture for best growth
<i>Opuntia sp.</i>	prickly pear cactus	many flattened segments, branching frequently, with thorns that are hooked on the ends; pear-shaped fruits	needs direct sun and warmer temperatures; allow top half inch of potting mixture to dry out before watering

Unit II - Plant Identification

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Peperomia argyreia</i>	watermelon peperomia	rounded succulent leaves that are dark green with silvery white strips; leaves and stems are succulent	does not tolerate overwatering; grows best in medium light
<i>Peperomia caperata</i>	emerald ripple peperomia	heart-shaped, dark green leaves have a corrugated, wrinkled surface; propagated from leaf cuttings; flowers are white spikes	grows well under moderate light conditions and at normal room temperatures; requires high humidity during the growing season; easy to overwater
<i>Peperomia obtusifolia</i> 'Variegata'	variegated peperomia	light green, succulent leaves edged with white	needs low moisture and does not tolerate overwatering; requires medium light and high humidity for best results
<i>Philodendron scandens oxycardium</i>	heartleaf philodendron	rapid-growing vine that is best adapted to a hanging basket, but is also popular on totem poles; deep-green, glossy leaves that are heart-shaped	prefers a sandy soil; does best when grown in indirect light, with high humidity and medium moisture
<i>Pilea cadierei</i>	aluminum plant	bluish-green leaves with a silvery-white stripe	requires high humidity and medium moisture; will tolerate lower light, but needs medium light to develop its best color
<i>Pilea involucrata</i>	friendship plant	fleshy, deeply quilted leaves that are almost circular; margins are scalloped; leaves are dark green with purple undersides	prefers semi-shade and no bright light; should never get too wet
<i>Pilea microphylla</i>	artillery plant	very small, light green, rounded leaves; very easily propagated by snapping off a cutting and placing it in moist soil	tolerates lower light levels, but needs high humidity
<i>Pilea nummulariiflora</i>	creeping Charlie	fast growing with tiny leaves; leaves are green, quilted, and almost circular; good for hanging	prefers semi-shade and no bright light; should never get too wet
<i>Plectranthus mummularis</i>	Swedish ivy	good hanging plant with bright green leaves	rich soil and medium light are needed for best growth

Floristry

Scientific Name	Common Name	Characteristics	Growing Conditions
<i>Sansevieria trifasciata</i>	gold-edged snake plant, mother-in-law's tongue	very stiffly erect; Hahni or bird's nest sansevieria is a dwarf, compact plant, with dark green leaves speckled with white; two other common types have tall, long leaves, one edged with yellow with the center of the leaf being dark green and the other with solid dark green leaves	tolerates dry conditions and low light; takes large amounts of abuse
<i>Saxifraga stolonifera</i>	strawberry plant	leaves grow in an almost circular rosette formation; deep green with toothed margins, silvery veins, and reddish-purple undersides; runners have little plantlets on the ends	should be given a small amount of direct sun every day
<i>Sempervivum tectorum calcareum</i>	hen and chicks	low growing succulent, about 1-3" tall; rosette of leaves with smaller plants around the outside of the larger plant	requires bright sun and warmer temperatures; water when top of soil is dry; may require daily watering in summer
<i>Spathiphyllum clevelandii</i>	peace lily	white flowers that resemble anthuriums and bright green leaves	well adapted to low light, but if flowers are desired higher light intensities are needed; will not tolerate drying out
<i>Syngonium podophyllum</i>	nephtytis, arrowhead	leaves are about 3 inches long and are arrowhead-shaped	grows best in bright, indirect light; soil should be kept barely moist; prefers a daytime temperature of 75° to 85°F
<i>Tolmiea menziesii</i>	pickaback plant	green, soft, hairy leaves; new plants will grow at the base of mature leaves	needs medium light, humidity, and moisture for best growth
<i>Zebrina pendula</i>	wandering Jew	colorful reddish purple leaves with silvery green stripes; hanging plant	tolerates low light, but for maximum growth and best color, medium light, medium humidity, and uniform soil moisture are needed

Unit II - Plant Identification

Summary

Florists use a wide variety of cut flowers, cut foliage, flowering potted plants, and foliage plants in their business. Successful employees must be able to identify plants, know their uses, and know how to care for them.

Credits

Floriculture Plant Identification. Slide set and script. Instructional Materials Laboratory, 1991.

Graber, Debra Terry. *Fresh Flowers: Book 2*. Lansing: John Henry Co., 1989.

Griffiths, Mark. *Index of Garden Plants*. Portland, OR: Timber Press, 1994.

L. H. Bailey Hortorium. *Hortus Third: A Concise Dictionary of Plants Cultivated in the United States and Canada*. New York: MacMillan Publishing Co., Inc., 1976.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Huxley, Anthony, et al. *Reader's Digest Success with House Plants*. Pleasantville, NY: The Reader's Digest Association Inc., 1979.

Redbook Florist Services Editorial Advisory Committee. *Green and Blooming Plants*. Paragould, AR: Redbook Florist Services, 1992.

Reiley, Edward H.; Carroll L. Shry. *Introductory Horticulture*. 3rd ed. Albany: Delmar Publishers Inc., 1988.

Society of American Florists and Ornamental Horticulturalists. *The Care and Handling of Flowers and Plants*. Alexandria, VA: Society of American Florists and Ornamental Horticulturalists, 1976.

Stratman, Teresa. *Retail Floriculture, Book 2*. Columbus: Ohio State University, 1976.

University Extension Agricultural Publications, University of Missouri-Columbia.

GO6510: Caring for Houseplants

GO6515: Lighting Indoor Houseplants

GO6650: Flowering Perennials

Lesson 1:
Plant Processes Affecting Shelf Life

In order to work with flowers and plants, understanding some of the basic plant growth processes is necessary.

Five basic processes are involved with plant growth: photosynthesis, transpiration, cellular respiration, water absorption, and translocation. Plants depend on these processes for growth. In order to ensure that plants grow properly, the florist should understand how these processes affect optimum growth.

Photosynthesis

Photosynthesis is the process by which green, living plants, in the presence of light, convert carbon dioxide and water into simple sugar, which is food and energy for plants. The formula is illustrated in Figure 1.1.

Simplified steps in the photosynthesis process - Carbon dioxide gas enters the plant through the stomata located on the leaves. Water is absorbed by the hair roots and then enters the leaves' pores by the xylem tissues. Light strikes the chlorophyll, which is present in the chloroplasts in the mesophyll cells of the leaves. Light energy is absorbed, enabling a chemical reaction to take place between carbon dioxide and the hydrogen in the water. Glucose, a simple sugar, is produced and then transported by the phloem tissues to other parts of the plant. Oxygen is released as a by-product through the stomata. Water is also released when the stomata open.

Photosynthesis and Shelf Life

When a flower is cut from a plant, its root system is taken away, which interrupts the photosynthesis cycle that is responsible for creating a plant's energy. A flower needs additional energy to finish opening, so another source of energy should be

provided by the florist. This energy is usually added in the form of a preservative, which contains sugar that the flower utilizes to produce food. If some source of energy is not provided, the shelf life of plant materials will be shortened.

The Transpiration Process

Transpiration is the process by which gases and water vapor move from an area of higher concentration to one of lower concentration. This process usually takes place on the leaf surface, although it also occurs on the stems and petals. Fresh flowers usually have a higher concentration of water vapor than the air around them. Therefore, water vapor from the flowers moves out into the surrounding air. If this happens faster than the flowers are able to take up water through their stems, they will wilt. Transpiration is greatly influenced by environmental factors such as light, temperature, relative humidity, and wind. The florist should regulate transpiration by keeping plant materials cool, in an area of high humidity, and out of drafts.

Cellular Respiration

Cellular respiration is the controlled breaking down of glucose, releasing the energy for plant growth, absorption, translocation, and many other metabolic processes occurring within the cell. Excess glucose molecules are often combined and stored in the form of starch in vacuoles within the cells. Nearly all respiration occurs in the presence of oxygen or O₂ (aerobic respiration). However, some cellular respiration may occur for a short time without oxygen (anaerobic respiration). The formula for aerobic respiration is illustrated in Figure 1.2.

The primary importance of respiration is that it enables the plant cell to release energy that is then used in many energy-requiring chemical reactions within the cell. In addition, respiration releases carbon dioxide (CO₂) and water (H₂O) into the atmosphere. Cellular respiration is a continuous

Figure 1.1 - Photosynthesis Formula

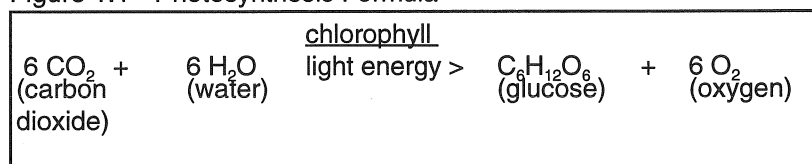
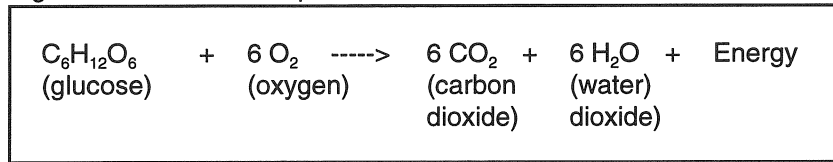


Figure 1.2 - Cellular Respiration Formula



process occurring twenty-four hours a day for as long as the organism lives.

Water Absorption and Translocation

Translocation is the movement of water soluble organic materials such as sugars and proteins and inorganic nutrients within the plant. The vascular system, consisting of xylem and phloem tissue, is the means by which translocation occurs. Water translocation is primarily upward from the roots through the xylem, while food (glucose) translocation through the phloem is from the leaves to the rest of the plant, including the root system.

A cut flower has been deprived of the roots that take up moisture and nutrients from the growing media, while a potted plant has intact roots, which allows the plant to continue to carry out all plant processes.

Ethylene Gas

Ethylene gas is produced by certain mature fruits such as apples, foliage, aging flowers, decaying plant materials, and the incomplete combustion of oil and gas in heaters. It is odorless and colorless and will cause the premature aging (senescence) and decaying of flowers.

Summary

Photosynthesis, transpiration, cellular respiration, water absorption, and translocation are the basic processes carried out by plants as they grow. Florists should understand these processes in order to be able to ensure that plants are in the best possible condition.

Credits

Wells, Judith A.; Janet Anderson. *Greenhouse Operation and Management*. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Lesson 2: Processing Cut Plant Materials

While working in the flower shop, it is extremely important to be aware of how to extend the life of cut plant materials. These items are perishable, and profit can depend on how well a florist is able to preserve the flowers received in the shop.

Evaluating the Quality of Cut Flowers

When receiving fresh flowers and greens, carefully evaluate them. Under careful examination, foliage will often show the age of a cut flower many days before the flower itself shows its age. Flowers should be turgid (full of water) and not limp or wilted. Colors should be vibrant and typical for the variety. Older flowers often fade, with the edges of the petals turning brown. Roses should be in tight bud. Chrysanthemums and other flowers often "shed" or drop petals as they age. Carnations show their stamens when they are old. Check all flowers and foliage for insects and mechanical injury.

Receiving Flowers from the Wholesaler

Unpack the flowers immediately upon receipt. If the shipment cannot be unpacked at once, at least open the boxes and uncover the flowers because heat can build up in the box. Be sure to inspect all flowers for damage or problems. If they show signs of gray mold (botrytis) or premature aging, notify the wholesaler or supplier immediately. Also remove any packing materials from the boxes.

Tools are often needed for unpacking. A hammer should be used to remove the wooden bar inserted into boxes for stability. A box cutter is handy for cutting cardboard cartons and scissors for cutting plastic bands from the cartons.

Once the quality of the material is checked, it is wise to check the flowers received against the bill to make sure the shipment and the charges are correct. Be sure to note any shortage on the invoice. Phone the wholesaler as soon as possible if the shipment is incorrect.

After unpacking the flowers, cut the stems and place them in fresh water at a temperature of 100° to 110°F with a preservative.

For best rehydrating, cut the flower stems under water to help prevent air blockage in the stem, which can cause wilting. Remove the foliage from the portion of the stem that will be underwater. If the foliage remains, it will rot and can clog the stems of the flowers, inhibiting the uptake of water. Remove dead and damaged flowers because they can produce ethylene gas, which will contribute to premature aging.

Preservatives will greatly increase the life of cut flowers. To ensure the best quality of the flower and customer satisfaction, preservatives should be used at all levels (grower-wholesaler-retailer-customer). Loosen bunches and plastic sleeves to facilitate the flower in opening. NEVER leave the flower out of water. Keep them in their buckets until they are to be placed in an arrangement. The buckets should be taken to the design table.

Customer education about the proper care of cut flowers, whether arranged or loose, is also extremely important. Care cards should be attached to each arrangement and plant that is sold. If possible, a sample pack of preservative should also be included.

Storing Cut Plant Materials

Most cut foliage should be wrapped to prevent desiccation and stored "dry" in the refrigerator. Foliage should never be stored with flowers and should be placed in a separate cooler if possible. Foliage such as croton, podocarpus, and eucalyptus should be put in water.

The temperature most conducive for cut flowers is 34° to 40°F. It is extremely important to clean the cooler often, discarding dead or dying flowers. Recut the stems and place them in fresh water with a preservative. Sanitation is of utmost importance. Scrub buckets often and rinse them with a weak bleach solution. A mixture of one part bleach to ten parts water is adequate.

Using Preservatives

Preservatives add nutrients to the water solution. When a flower or foliage is cut, it no longer has the ability to take up nutrients. Preservatives attempt to fill this void. In addition to providing nutrients, preservatives often contain a disinfectant to help reduce or inhibit the growth of bacteria and to freshen the water. Some preservatives contain a surfactant that helps to break the stem's seal, allowing water to enter.

Processing Completed Designs

Most commercial floral foams contain a preservative. When designing in floral foam, designers completely soak the floral foam. After the foam is secured in the container, additional water is added to come to the top of the container. After completing the arrangement, more water is added. Water should be added to the arrangement daily. Store the arrangement in a cool refrigerator, considering the needs of the different plant varieties. Most flowers are kept best at 34°F and 80 percent relative humidity.

Summary

Flower shop employees must know how to properly handle, store, and care for cut plant materials. If they do not, the life of fresh cut flowers and foliage may be shortened, and they may quickly become unsalable, which would decrease the shop's profits.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Kuchareski, Dennis. *Landscaping and Greenhouse Technology*. Trenton: New Jersey Department of Education, 1989.

Woodhull, James; Valerie Brosey; Petel Kreysa. *A Catalog of Performance Objectives and Performance Guides for the Floriculture Worker, Retail Flower Shop Salesperson, and Floral Designer*. College Park: University of Maryland Department of ITOE, 1984.

Lesson 3: Caring for Potted Plants

Since florists sell potted plants in addition to cut flowers and arrangements, employees need to be aware of the proper care for these plants.

Evaluating Potted Plants

Unpacking potted plants when they come into the flower shop is not as simple as it may sound. An employee should do several things. One of the first steps is to carefully inspect the foliage of potted plants for signs of disease, insect damage, or damage from shipping. If any disease or insects are noted, isolate the plants immediately and notify the supplier. If there is physical damage that will cause the plant to be unsalable, notify the supplier. Also, check the stage of development of the flowers since customers expect longevity as well as a color display in potted plants. Most growers know the best stage at which to ship plants, but occasionally a florist may receive plants that are too "green" or too mature.

Maintaining Potted Plants

Unwrap, unbox, and unsleeve potted plants immediately after receiving them from the wholesaler. Inspect foliage for signs of insects, disease, or physical damage. Remove all dead or damaged parts, and water the plants if they are dry. Give them enough water so that the water drains through the bottom of the container. Take special care in watering plants that have plastic container liners or foil around them so that they do not sit in water. The container liners may need to be removed until the plants have finished draining.

For display purposes, do not place the plants in a cold draft or close to a heater. Remove any dead or yellowing foliage at least once a week. How often a plant is watered will depend on the specific plant's needs, the season, and the temperature of the shop.

Care Tags

Most florists maintain a good supply of care tags, which are specially printed tags with pictures of the individual plants and a paragraph or two on the basic care of the plant. The information includes the plant name, the optimum light conditions, the frequency of watering required, and any other special instructions. Attach a care tag to each plant to ensure that customers know how to properly care for their purchases.

Summary

Like cut plant materials, potted plants need to be cared for correctly in order to remain salable. The flower shop employee therefore needs to know and practice the proper care of these plants.

Credits

Redbook Florist Services Educational Advisory Committee. *Green and Blooming Plants*. Paragould, AR: Redbook Florist Services, 1992.

University Extension Agricultural Publications, University of Missouri-Columbia.

- GO6511: Care of Flowering Potted Plants, Part I
- GO6512: Care of Flowering Potted Plants, Part II
- GO6513: Care of Flowering Potted Plants, Part III

Unit IV - Mechanics of Floral Design

Lesson 1: Floristry Tools and Supplies

Many specialized tools are used in floral shops. It is necessary to be able to identify them as well as maintain and safely use them.

Floristry Tools and Their Uses

Most flower shops provide each designer with a personal set of tools. Tools should only be used for their designed purpose or they may be rendered useless. Figure 1.1 illustrates common tools used in floral designing.

The floral knife is a basic tool every designer should become accustomed to using. Using the knife may seem awkward at first, but with practice the user will become proficient. Knives are the tools of choice for cutting stems because scissors will mash the ends and impede the uptake of water.

Knives may either be folding or similar in shape to kitchen paring knives. Inexpensive knives with plastic handles may be used, but they usually do not last very long. This type of knife is good for cutting foam, but it is not recommended for use on fresh stems.

Wire cutters are chiefly used for cutting wire. The ones with spring action handles are the easiest to use.

Ribbon scissors have long slender blades and are used for cutting ribbon and fabric.

Floral shears have serrated blades. They are designed for cutting heavier material, such as wire and stems.

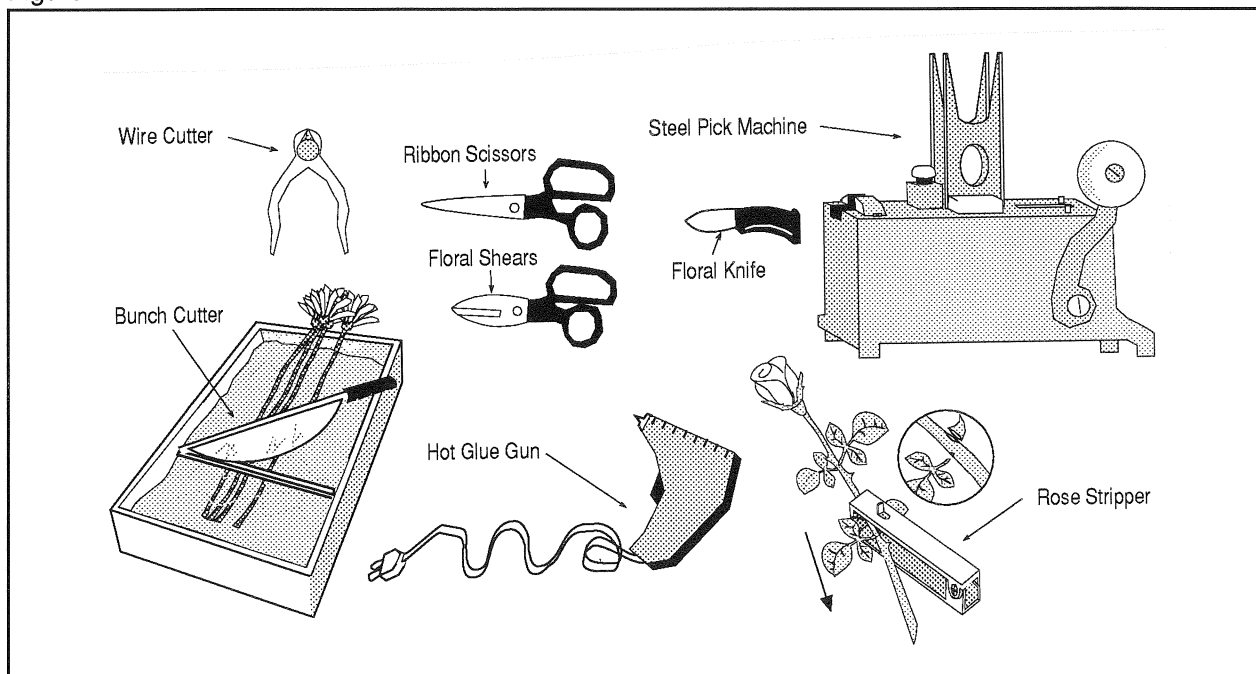
A rose stripper removes thorns from roses.

A steel pick machine attaches steel picks to stems and other objects to allow for insertion into floral foam. It is chiefly used with silk and dried materials. The stem or material to be picked is held against a steel pick at the end of the machine. When the handle is pulled down, the clamps of the steel pick are bent around the material being bound.

A bunch cutter enables the florist to cut bunches of flower stems at once. Some have a large sharp blade on a stand. Others are set up in a tub so that the stems may be cut under water.

The electric glue gun has many uses and is widely used by florists. A glue stick is pushed into the back of the gun. When the gun is plugged in, it

Figure 1.1 - Common Tools



Floristry

becomes hot and melts the glue. The melted glue is then pushed out the tip, usually by the trigger of the glue gun. Glue guns can use hot or cool melt glues. Almost anything can be joined together with glue as long as the object to be glued is dry, not too smooth, and not too porous. Glue dries very quickly, so it is very efficient and helpful in design work. The main disadvantage is that the glue will not hold at temperatures below 40°F. Never lay a glue gun on its side because the glue can run inside and ruin it.

Floristry Supplies and Their Uses

Many different supplies are used in floristry. The most commonly used floristry supplies will be discussed in the following paragraphs. Figure 1.2 shows some commonly used supplies.

There are several different kinds of wire. Florist wire comes in 18" lengths and is either green enameled or silver annealed (sometimes called bright). It also comes in different weights, or gauges, ranging from #16 to #30. The larger the gauge number, the lighter or smaller the weight of the wire. Florist wire is used to bind materials together and strengthen stems. It is most frequently used in making corsages, boutonnieres, and wedding bouquets.

Paddle wire is a continuous wire wrapped on a wooden paddle. It also comes in weights ranging from #16 to #30. Its main use is for garlands.

Chicken wire comes in 12" and 18" widths in 150 foot rolls. It is used to cover floral foam in large arrangements, helping to stabilize the stems.

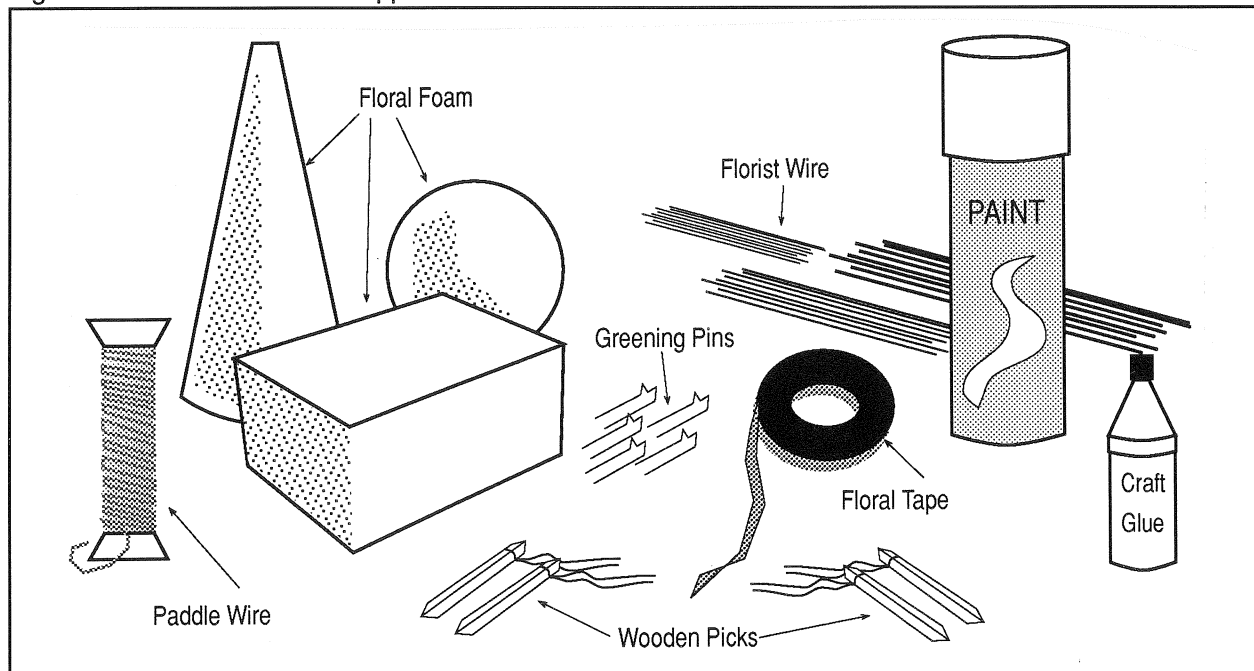
Two types of tape are used in floral designs. Floral tape is waxed crepe paper that will stick to itself when stretched. It comes in many colors, but white, moss green, and brown are used most frequently. Floral tape is used to cover wires, to help hold individual flowers together, and to cover any exposed flower stems. It comes in widths of ¼", ½", and 1". The one-half inch width is the most commonly used size.

Waterproof tape is used to secure floral foam in containers. It may be green, white, or clear and is available in widths of ½" and ¼".

Florists also use several glues or adhesives.

Pan glue is available in bags of beads. It will melt in an electric skillet at a temperature of 275°F. Stems and other materials to be adhered can be dipped into pan glue and inserted where desired.

Figure 1.2 - Common Floral Supplies



Unit IV - Mechanics of Floral Design

When using a glue gun, cool melt glue is commonly used on fresh flowers, foliage, and balloons. Hot melt glue is used for silk and dried arrangements, fastening accessories together, fastening ribbons, and bonding holding devices to containers. Hot melt glue sticks can cause severe burns.

Floral adhesive (rubber cement) is used in fresh designs. It will adhere even when exposed to extremely humid conditions. However, floral adhesive takes quite a bit longer to dry than glue.

Paints (aerosol sprays) are used to enhance flowers or accent colors. They come in a wide variety of colors. Regular floral spray is available in opaque colors. Tints give transparent colors.

Dyes can also be used to change the colors of flowers. Two major kinds of dyes are used by florists. Flowers are immersed in dip dyes. A major disadvantage exists in using dip dye, though. When dipped flowers used in a corsage or boutonniere become damp, the colors can run onto fabrics and clothing.

Stem dyes are absorbed by flower stems. The cut stem ends are placed in the dye and remain there for several hours while they absorb the color.

Corsage and boutonniere pins are used to secure corsages and boutonnieres to garments. Corsage pins are 2" long and have either a pearl head or a white head. Boutonniere pins are 1½" long with either a white or black head.

Metal picks are used in the pick machine to help insert stems and other materials into floral foam. They are available in a variety of lengths in bundles of 100, in a case of 2,000.

The chief use of wooden picks is attaching bows to potted plants. They may also be used as stems for clusters of dried or silk flowers. Wooden picks come in green or natural colors in lengths of 2¼" to 6." One end of the wooden pick is pointed and the other has a fine wire wrapped around it. This wire is wrapped around the stem and then inserted into the foam. If it is inserted into wet floral foam, the moisture causes the pick to swell and thus secures it in the foam.

Floral foam is used in fresh, dried, floral, and silk arrangements. The foam secures flowers and materials in arrangements. Floral foam for fresh flowers and foliage is wettable and will soak up water. Floral foam for dried and silk arrangements is more firm and will not soak up water. Both types can be cut with a knife or a piece of florist wire.

Anchor pins have four short plastic prongs attached to a flat base. An anchor pin is glued, flat base down, into the bottom of a shallow container to help hold the floral foam in the container.

Greening pins, or fern pins, are U-shaped metal pins usually used for securing moss to floral foam. They may also be used for securing greens to Styrofoam™, as when securing evergreens to a wreath frame.

Hyacinth stakes are tall green stakes that were originally used to stake blooming plants, but that can also be used to help support flowers in a very large arrangement. They are available in lengths of 12", 18", and 24".

Water picks are plastic tubes with rubber lids that have holes in them. They can be filled with water, and stems are then pushed through the holes. Water picks are useful when fresh flowers are inserted in items where they will not have water, such as a sympathy wreath or a foliage plant. They are often used with boxed roses as well.

Orchid grass, or Easter grass, is shredded paper used to cushion flowers, usually orchid corsages, in a box. Its common colors are green and white.

Corsage and rose boxes are made especially for packing corsages and unarranged flowers. The boxes can be white cardboard or clear plastic. They come in a variety of sizes, ranging from small boxes for boutonnieres to large boxes for wedding bouquets.

Sure stick is an extremely sticky florist clay. It is primarily used to hold dry floral foam in a container.

Foils come in two main types. Lightweight foil is colored on one side and silver on the other. It is more easily torn. Polyfoil is a thicker foil. It has a thin sheet of plastic between its layers and is much

Floristry

sturdier than light-weight foil. The primary use of foil is for covering the pots of flowering potted plants.

Clear plastic or cellophane corsage bags are available in various sizes. The smaller ones are used for covering corsages and boutonnieres, and the larger ones are used for wedding bouquets and even flower arrangements.

Enclosure cards and envelopes may have the flower shop's name and logo on the back. Used to include greetings from the sender, cardettes look like plastic pitchforks. Their major use is to hold enclosure cards in arrangements and plants. They come in different stem lengths and in packs of 100 or in a case of 1,000.

Care and handling tags can be purchased pre-printed from the wholesaler. They contain information that will help customers care for their plant or arrangement. The care tags for potted plants and foliage plants will usually have a picture of the plant printed on them.

Chenille stems are large pipe cleaners. They come in a wide variety of colors and are used to attach bows to arrangements, to secure pew bows for weddings, and to create faces and figures in novelty arrangements.

Candle stakes are green plastic cups with prongs on the base that can be inserted into floral foam to hold a candle in securely. They can be purchased in various sizes to hold different sizes of candles.

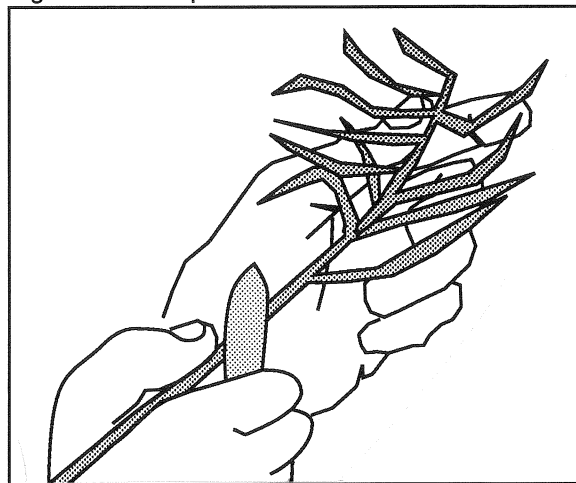
Other specialized products are available for use in the floral trade. For example, sprays are available that can be misted on some of the more delicate flowers to form a shield that helps prevent the loss of water and so allows them to retain their freshness. For foliage, products such as Plant Shine® can be sprayed on to make leaves glossy.

Safety Precautions

Some of the florist's tools can inflict injury on those using them, so a few precautions are necessary.

To properly use a knife, the designer usually keeps the knife in one hand. Always use a good quality, **sharp** knife. You are less likely to cut

Figure 1.3 - Proper Knife Position



yourself with a sharp knife than a dull one. Hold the blade of the knife between your thumb and forefinger, with your forefinger against the top of the blade. Cut toward yourself at an angle. The knife should be directed just below your thumb so you can avoid cutting yourself. It may take some practice to become proficient at using the knife. When using the knife, it is important to pull the knife through the stem to form a slanted cut (Figure 1.3).

When using other cutting tools, make sure that a tool designed for that particular purpose is being used. For example, use wire cutters to cut wire and ribbon scissors to cut ribbon. Always watch to keep fingers from being cut.

Hot glue guns become VERY hot and can cause painful burns. As with all electrical appliances, be sure to keep the glue gun away from water.

Steel picks have sides that are razor sharp. Care must be taken when handling them.

Summary

The florist must learn to use a large number of special tools and supplies in order to create floral designs. Safety precautions must be observed when using some of these tools in order to avoid injury.

Credits

Anderson, Gary A. *Floral Design and Marketing*.
Columbus, Ohio: Ohio State University, 1988.

Hunter, Norah T. *The Art of Floral Design*.
Albany: Delmar Publishers Inc., 1994.

Redbook Florist Services Editorial Advisory
Committee. *Basic Floral Design*. 2nd ed.
Paragould, AR: Redbook Florist Services, 1993.

Reiley, Edward H.; Carroll L. Shry. *Introductory
Horticulture*. 3rd ed. Albany: Delmar Publishers
Inc., 1988.

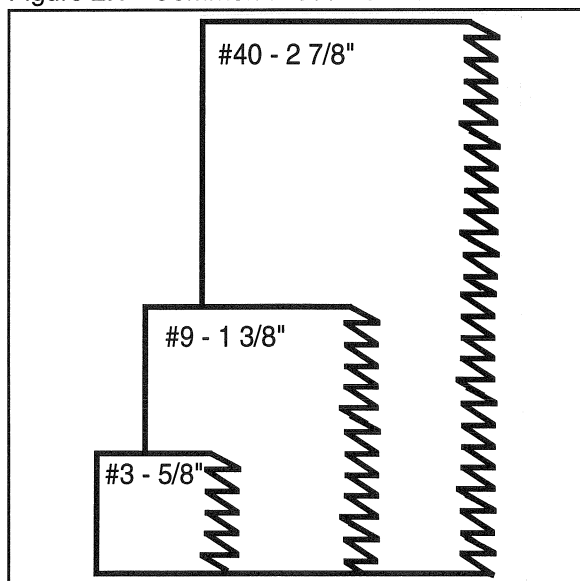
Lesson 2: Constructing Bows

Florists commonly use bows in their design work. The corsage is the florist's main creation requiring a bow; however, funeral pieces, potted plants, and some floral arrangements often include a bow as well.

Ribbon Fabrics and Widths

Ribbon comes in many widths and materials. The most common sizes are #3, #9, and #40 (Figure 2.1). The most common material is single-faced satin. For corsages, #3 ($\frac{5}{8}$ " wide) is the width preferred by most florists. Very narrow ribbon, such as $\frac{1}{8}$ " can also be used for corsages, but it requires many more loops, and thus more ribbon. Florists commonly use #9 ($1\frac{3}{8}$ ") for flowering potted plants and #40 ($2\frac{7}{8}$ ") for funeral pieces and wedding pew bows. A popular size for wedding arrangements is $\frac{1}{8}$ " ribbon.

Figure 2.1 - Common Ribbon Sizes



While satin is the least expensive and most commonly used fabric, other ribbon materials include velvet, lace, burlap, cotton, wired ribbon, and various novelty ribbons. Ribbon comes on cardboard spools called bolts. There are usually 100 yards of #3 satin ribbon on a bolt, 100 yards of #9, and 50 yards of #40. It is important to be able to judge how many bows each bolt of ribbon will

produce, especially when filling orders for weddings and special occasions where a specific ribbon has been requested. If a bolt only makes five bows and the order requests seven, you will need another bolt of the same ribbon.

Bow Making Tips

Gather all materials before beginning bow construction. Determine which ribbon size and fabric type will enhance the corsage, arrangement, etc. Customers may also specify which ribbon they want.

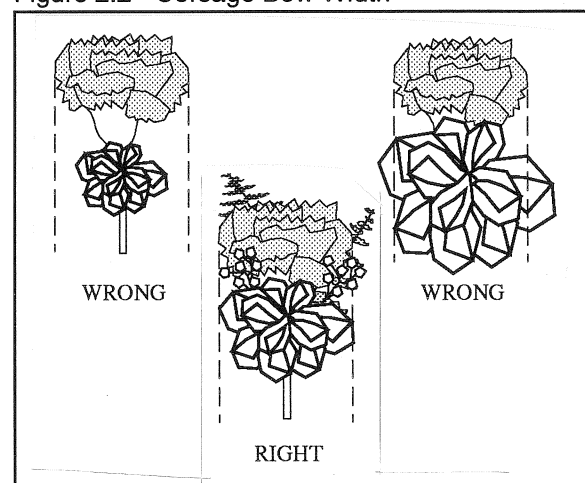
Most ribbons are single-faced, with a right and "wrong" side. With satin ribbon, the right side will be shiny, the wrong side dull. Keep the right side out.

Use ribbon directly from the bolt instead of cutting the ribbon prior to beginning the bow.

Hold the bow in one hand while feeding the ribbon into it with the other hand. The bow should be held with the thumb and middle finger. The thumb stays on the top center, while the finger acts like a shuttle as the ribbon is worked back and forth from underneath.

Make the bow in proportion to the arrangement. The bow should be an accessory rather than the center of interest; it should not dominate the design. For corsages, the bow should be the width of the flowers (Figure 2.2). The bow should

Figure 2.2 - Corsage Bow Width



Floristry

complement an arrangement. It is best not to make bows with large, loose loops. They crush easily and do not hold their shape well.

A bow's tail length is usually measured in proportion to the width of the ribbon. Generally, the tail should be no longer than the longest loop of the bow. Longer tails may be used in bud bases, rose vases, or on football mum corsages.

A bow without a center loop is used when it will be tucked under a flower or placed deep inside an arrangement.

Bows to be used on church pews are constructed from #40 ribbon and tied off with heavy (#18) wire. The bows are then taped, and the wire is shaped to fit over the pew. If aisle candles are used, tie the bow off with ribbon and then tie the bow onto the aisle candle. Foliage may be added to the candle and ribbon.

Many florists make bows in advance, especially for holidays and weddings. They are usually stored on Styrofoam™ sheets and kept away from humidity and dust so that the labor will not be wasted.

By practicing, a person can become proficient at making bows. Use various sizes of ribbon while practicing.

Constructing a Bow

The steps in making a bow seem complicated at first, but with some practice, the flower shop employee will soon become adept. Different florists have various methods for constructing a bow, but once the general steps have been mastered, others can be learned more easily. If a shop has a particular way of constructing bows, it is best to learn to make bows that way. Designers are usually willing to instruct others in their methods, but be sure to learn to make the bows before the rush of the holidays.

When working with single-faced ribbon, it is important to always keep the right side out. The ribbon must be twisted after each loop is made. Begin with a tail or length of ribbon about 2" long. Loop the ribbon over the left thumb (right thumb if left handed). Be careful not to pull too tight or you

might not be able to get your thumb out after completing the bow!

Now twist the ribbon one turn under the thumb, gripping the ribbon between the thumb and middle finger. Make a loop in the ribbon to be the first loop in the bow, bringing the ribbon between the thumb and middle finger, again twisting the ribbon, and form a loop on the other side. The length of the loops will depend on the use of the bow. For a corsage, the bow needs to be in proportion to the flowers. If the bow is too large, it will become the focal point of the corsage and overpower the flowers. If it is too small, it will be hidden and of no decorative use.

Continue making loops until the desired number of loops is reached. Generally, corsage bows have three loops on a side. If the ribbon is the main focus, such as on a box or gift, more and larger loops may be used. After making the last loop, leave another tail to match the first one. Cut the ribbon tails at an angle.

Now tie off the ribbon. Bows may be tied off with wire, chenille, or more ribbon. If the bow is going to be tied into a corsage, it is generally easiest to tie it off with ribbon to avoid having to retape and cover the bare wires. In a potted plant or funeral piece, the bow is often tied off with a wired wooden pick that is then used to insert the bow into the soil or arrangement.

Slip the tie under the thumb, then carefully tighten the bow. The bow may now be inserted into the corsage, arrangement, or plant.

Jiffy Bows

Some pre-constructed bows are now on the market. They are usually called jiffy or pull bows. With the pull of a small string, the loops are formed and a perfect bow is made with little effort. These bows are best used for packages, wedding pews, and potted plants. They are considerably more expensive than bows made in-house from satin ribbon.

Summary

In order to complete their designs, florists often use bows that they construct themselves from

Unit IV - Mechanics of Floral Design

ribbon that comes in a number of different materials and widths. While constructing a bow may be difficult at first, it becomes easier with practice. In addition to making their own bows, florists may also purchase ready-made bows.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Stratman, Teresa. *Retail Floriculture, Book 2*. Columbus: Ohio State University, 1976.

Woodhull, James; Valerie Brosey; Petel Kreysa. *A Catalog of Performance Objectives and Performance Guides for the Floriculture Worker, Retail Flower Shop Salesperson, and Floral Designer*. College Park: University of Maryland Department of ITOE, 1984.

Lesson 3: Containers

Containers are available in many different sizes, shapes, and colors. Prices for containers also vary. However, price should not be the ultimate criterion for selecting containers, but rather how useful and easily deliverable the containers will be.

Container Styles

Containers are available in several basic styles. Bowls and trays are the most commonly used containers. They are usually used for centerpieces and longer, low arrangements. Cylinders are tall vases used to arrange long-stemmed flowers and vertically styled arrangements. Urns or compotes are footed containers. They can be used for an arrangement that does not require much space. Novelty containers are usually used for holidays or special occasions, as in the case of baby vases. A few examples of containers are shown in Figure 3.1.

Container Varieties

Containers are constructed of various materials. Plastic containers are used most often. The newer plastic containers on the market are much more attractive and often do not look inexpensive. They are available in a wide range of colors and shapes.

Glass is also popular with florists, especially for tall cylindrical containers and bud vases. Glass containers are usually clear, green, or frosted. However, newer varieties on the market are gold or silver coated.

Ceramic containers, while more expensive, are usually desirable for permanent arrangements. They are available in a variety of colors, sizes, and shapes.

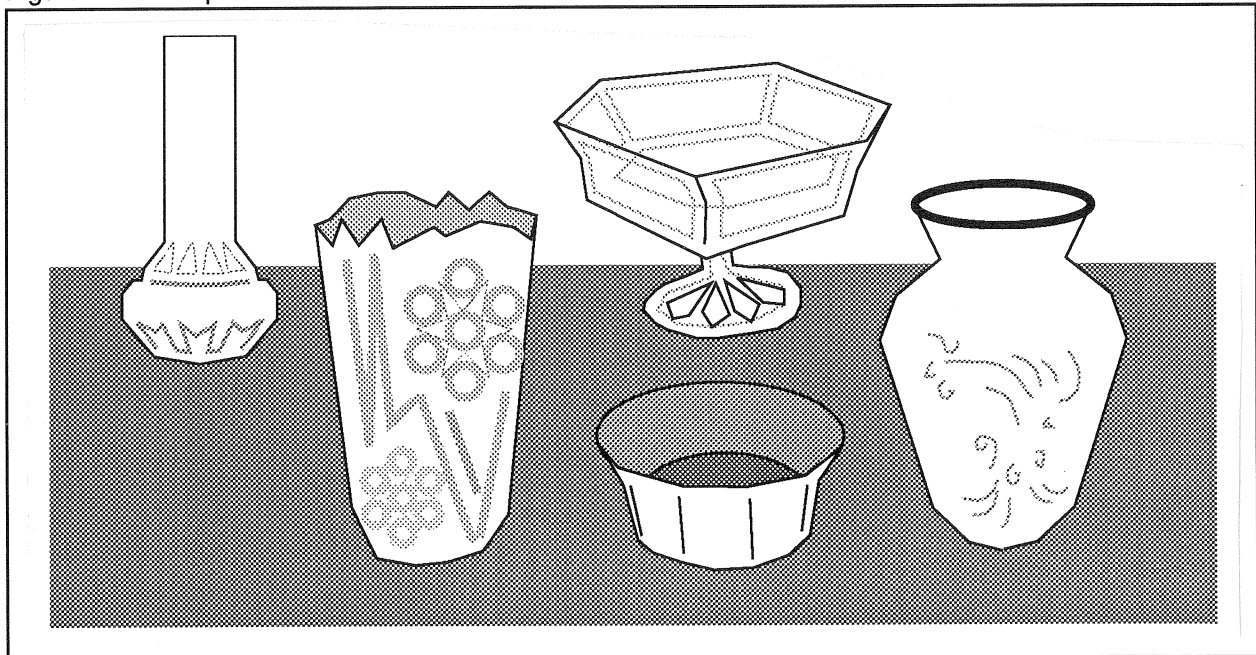
Wicker baskets have become more popular in recent years. The major disadvantage to using a wicker container is that a liner is necessary for a fresh arrangement.

Papier-mâché containers are popular for sympathy flowers. They are temporary containers and are not intended for long use, because they will eventually deteriorate and leak.

Selecting a Container

When choosing a container, consider the size of the finished arrangement. The container and finished arrangement should be in harmony. The final form of the design is often dictated by the container. The color of the container is another important consideration. It should never detract from or draw attention away from the arrangement. The size and weight of the flowers also affect the

Figure 3.1 - Sample Containers



Floristry

selection of a container. A major consideration is the use of the finished arrangement. A more formal container should be used for a formal dinner party, while a casual basket can be used for an informal occasion. Prices for containers vary and may be a consideration depending on the needs of the customer.

Holding Devices

Holding devices secure flowers and materials in the arrangement.

Floral foam is the most frequently used holding device in floral arrangements. It is a soft, lightweight material that is very absorbent. Wet foams are used in fresh arrangements and dry foams in silk and dried floral arrangements. Most containers are manufactured to hold a specific size of foam. Because foams can be cut to fit virtually any container and because of their superior holding properties, they are the first choice of most florists to secure arrangements.

Designers should be familiar with other holding devices as well. Styrofoam™, which is available in white or green, is similar to dry floral foam, but it is coarser and does not cut as easily. It is stronger than floral foam, though. Some florists like to use shredded Styrofoam™ for holding an arrangement, especially a tall cylindrical one.

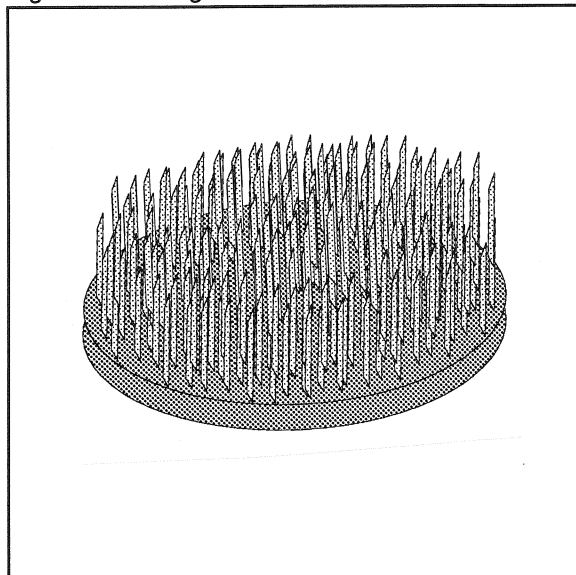
Frogs, or pin holders, were used before floral foams were invented. Several different styles of frogs are available, but the most common one is metal with many needles or prongs coming up from the bottom. Flower stems are stuck onto these prongs (Figure 3.2).

Glass marbles are often used in taller containers to help hold flowers in place. However, it is difficult to transport arrangements in which they are utilized, so the flowers should be arranged where they will be used.

Selecting a Holding Device

Choosing which holding material to use depends on several factors. If the material to be arranged is dried or silk, it will require a different holding device than fresh materials that must be in water. The weight and size of the finished arrangement

Figure 3.2 - Frog/Pin Holder



will also help determine which holding device to use. Very large arrangements need to have sturdy bases. If several blocks of floral foam are used for a sturdier base, chicken wire may be necessary to hold them together. If the flowers used have very thick stems, chicken wire often must be placed over the top of the floral foam to reinforce it.

The type of container may also determine which holding device to use. For example, clear containers do not lend themselves to the use of floral foam. Designers should instead use shredded Styrofoam™, clear marbles, or a grid or lacing of foliage. If a very expensive container is used for an arrangement, then a material like chicken wire obviously should not be used. If the container is papier-mâché, however, chicken wire will work very well. When using shallow dishes, glue anchor pins to the bottom of the container, and push the foam down on the prongs.

If the arrangement is to be transported, the florist needs to make sure that the holding device is very substantial. The use of the arrangement also affects the selection of a holding device. When preparing wedding bouquets for brides and bridesmaids, it is often necessary to use a spray material that seals or locks the flowers into the holding devices, since the bouquets will be carried about, often rather carelessly. Funeral pieces are often transported, so they too need to be securely

held together. One professor of floral design used to throw each student's finished funeral piece across the classroom to see how well it would hold up!

Preparing Floral Foam

When using wet floral foam, it is important to soak it properly. Allow the foam to naturally soak up the water; never force it down under the water. When it stops bubbling, the foam is saturated. When placing the foam in the container, leave one inch of foam above the lip of the container to allow enough room to stick some stems in horizontally. For larger stems, leave 1½" above the lip.

After the foam is soaked, it is quite soft and easy to cut with a piece of wire or a knife. Smither-Oasis is a large manufacturer of floral foam and offers several different types for different uses. Springtime® foam is softened and is designed to be used mainly with spring flowering bulbs that have very soft stems. Deluxe foam is sturdier and should be used in larger arrangements and with heavier flowers. Sahara® foam is designed for use in dried and silk floral arrangements. Sahara® is brown and comes in two strengths. Strength II is used in larger arrangements or for flowers with thicker stems.

Floral foam blocks come in standard sizes of 9" x 4" x 4" and are packaged with 48 pieces to a case. They are also available in different shapes, usually specialty shapes, cylinders that will fit standard containers, or shapes for funeral pieces.

When placing floral foam in a container, leave a space between the container and the foam to hold water. This space is called a water well, and it is necessary for watering the arrangement.

Floral foam usually needs to be secured in the container, depending on the size and shape of the container. If the foam is not tightly wedged into the container, secure the foam using waterproof tape. The type of container used usually determines whether waterproof tape is needed. One piece of tape placed across the top of the container is usually adequate. Make sure the sides of the container are clean and dry or the tape will not stick. If securing a large piece of foam, it may be necessary to cross another piece of tape over the

first piece. Do not let the tape extend over the sides of the container any more than necessary. To blend with the color of containers, waterproof tape is available in several colors, including green, white, and clear.

Anchoring a Frog to a Container

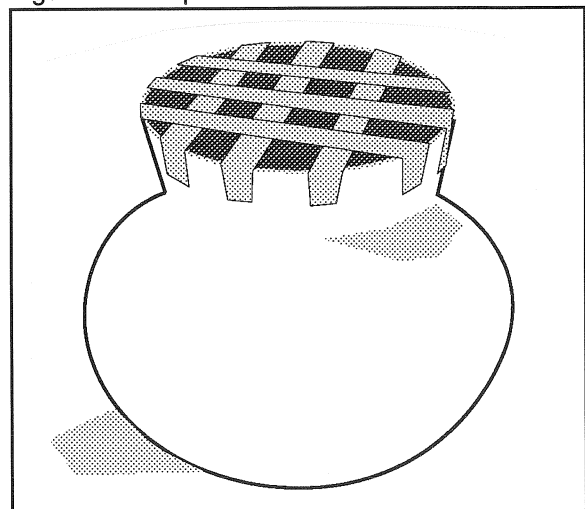
A frog, or pin holder, can be glued to a container with pan melt glue if it is to stay in the container permanently. If not, roll florist clay into a long cylinder, or "snake." Form a ring around the edge of the pin holder with the clay, then press it firmly onto the container. For maximum holding ability the pin holder and container must be clean and dry.

Constructing a Grid

Another holding device used by florists is a grid. To begin constructing a grid, tape several horizontal rows of clear waterproof tape across the top of the container. Then tape several rows perpendicular to the first rows. This procedure will create a grid as illustrated in Figure 3.3. Grids are mainly used with tall cylindrical containers.

Foliage is also commonly used to construct a grid (Figure 3.4). This procedure is also called lacing. Leatherleaf is the foliage most commonly used. However, other foliage, such as huckleberry and tree fern, may be also be used. To construct a grid using foliage, fill the container with water, then remove the leaves that will be under water. Insert

Figure 3.3 - Tape Grid



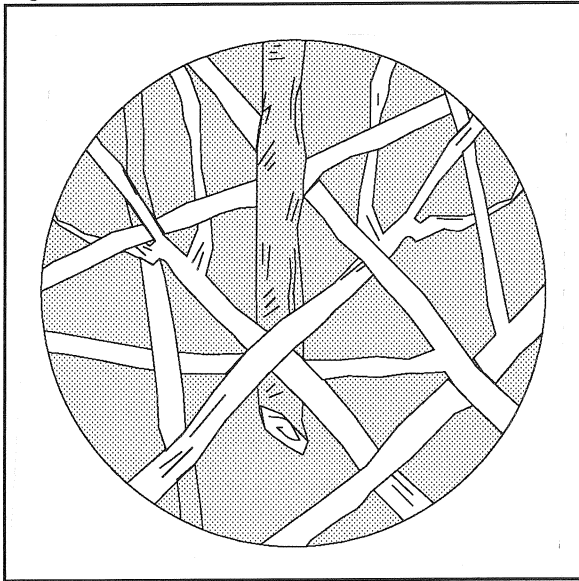
Floristry

the stems at an angle to create a tight interlocking grid.

Summary

Designers may choose from many different styles, sizes, materials, and colors when selecting the appropriate container to be used for a particular floral arrangement. They must also be familiar with various holding devices in order to utilize the best one for a particular arrangement.

Figure 3.4 - Foliage Grid



Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Redbook Florist Services Editorial Advisory Committee. *Basic Floral Design*. 2nd ed. Paragould, AR: Redbook Florist Services, 1993.

Lesson 4: Wiring and Taping

Several different techniques may be used for wiring flowers for floral designs. In corsages, flowers are taped as well as wired.

Why Wire Flowers?

Flowers are wired for arrangements and corsages. Roses are often wired in arrangements to ensure that they do not develop "bent necks." With other flowers, wire is used to strengthen weak stems or for arrangements that will be transported long distances. Wire is also used for shaping flowers. In corsages, wire is used to replace stems, eliminating the bulkiness of the stem and leaving the flower flexible.

Gauges of Florist Wire and Their Uses

Florist wire is numbered according to its diameter in even numbers in units called gauges. The smaller the diameter, the higher the number of the gauge. The gauges commonly used in corsages are 24, 26, and 28. Roses and other heavy flowers usually require 24 gauge wire. More delicate flowers, such as stephanotis, require 26 and 28 gauge. See Figure 4.1 for examples of flowers and corresponding wire sizes.

Figure 4.1 - Flowers and Corresponding Wire Sizes

Calla Lily	18-20
Gladiolus	18-20
Standard Chrysanthemums ...	18-20
Stock	18-20
Carnation	20-22
Gerbera Daisy	20-22
Snapdragon	20-22
Tulips	20-22
Pompon Chrysanthemum	20-24
Rose	20-24
Freesia	22-24
Orchids	24-28
Stephanotis	26-28

A heavier wire is available in 18 gauge. It is used in construction work, such as making floral or

baby's breath headpieces for weddings, serving as a base for a wrist corsage, or hanging a pew bow at a wedding.

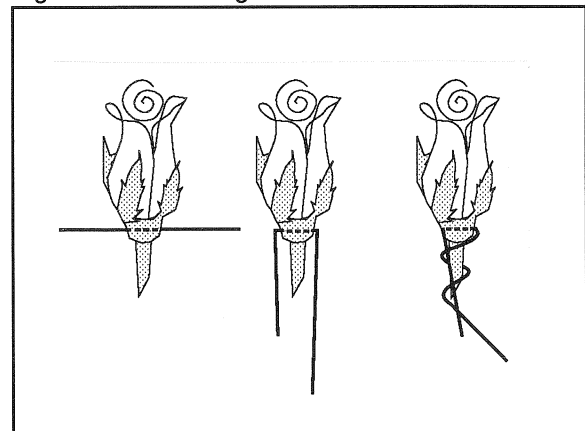
Several important things should be remembered when using floral wire. The lightest gauge wire possible should always be used for body flowers. Using the lightest wire ensures that a corsage, for example, will be as lightweight as possible. Keeping the different gauges separate is also important because design time can be wasted trying to sort out the wire. Devices are sold specifically for storing wire, or one can be constructed by gluing tubes of PVC pipe vertically on a base.

Wiring Methods

Several methods are used to wire flowers. The best method to use will depend on the type of flower as well as its weight and/or size. Experience with wiring flowers will help the florist to determine which method would be the best to use for a particular flower or purpose. Wiring techniques include the piercing method, the insertion method, the clutch method, the hook method, the hairpin method, the stitch method, and the straight-wire method.

In the piercing method (Figure 4.2), insert the wire halfway through the calyx of the flower, then bend both ends down. Slightly twist the wire together at the end to make wrapping the wires together easier. Roses, carnations, and other flowers with a similarly large calyx are wired with the piercing method.

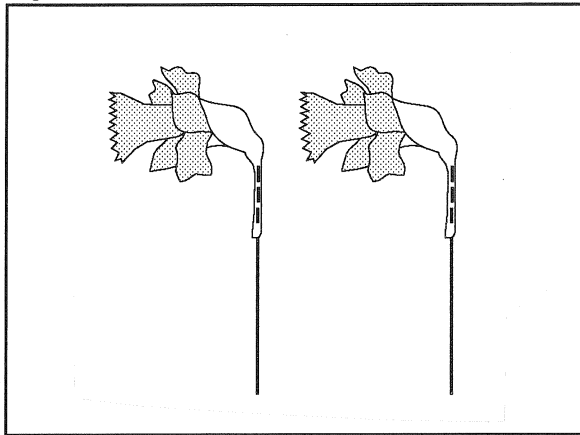
Figure 4.2 - Piercing Method



Floristry

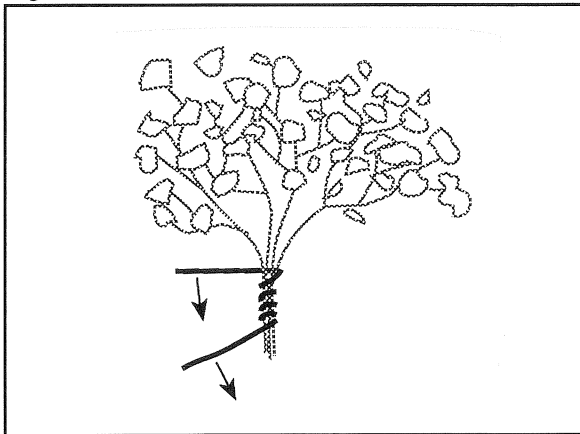
To use the insertion method (Figure 4.3), cut the stem to about 1" in length and insert the wire inside the stem. Push the wire up until it is in the flower head. The wire must NOT be visible from the top of the flower. Daffodils, asters, and other flowers with well attached heads may be wired with the insertion method.

Figure 4.3 - Insertion Method



To use the clutch or wrap-around method (Figure 4.4), wrap a light wire around the stem or cluster several times. Then bend the two wire ends down alongside the stem or stems. Filler flowers and other small mass flowers, such as baby's breath and statice, are wired with the clutch method.

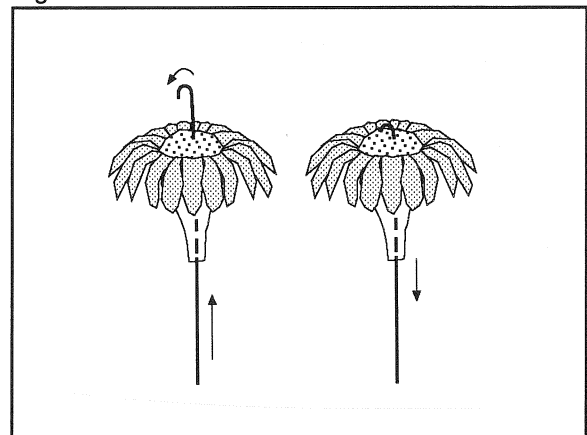
Figure 4.4 - Clutch Method



The hook method (Figure 4.5) is similar to the insertion method. When inserting the wire into the base of the flower head, however, push the wire through until it comes out the top of the flower. Make a small hook from this wire, then carefully

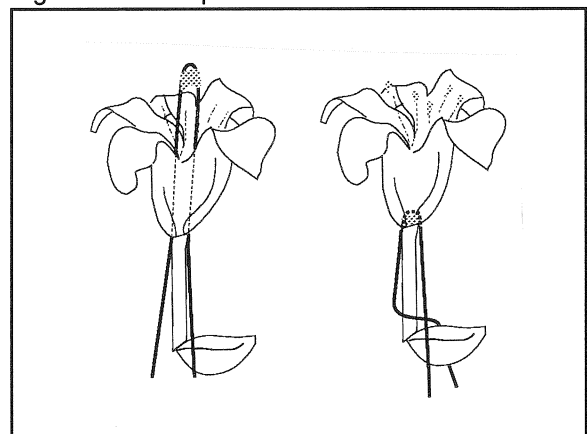
pull it back down into the center of the flower. Again, this wire must NOT be visible. Chrysanthemums, daisies, and similar flowers with flattened heads, hard centers, and no apparent calyx are wired using the hook wire method. It is also used for any flower that is likely to break off at the head.

Figure 4.5 - Hook Wire Method



For the hairpin method (Figure 4.6), bend the wire into a large U-shape and insert a small piece of moist cotton into the bend. Pull the wire down into flower, then wrap it around the stem. The hairpin method may be used to wire flowers that have a tubular shape, such as stephanotis.

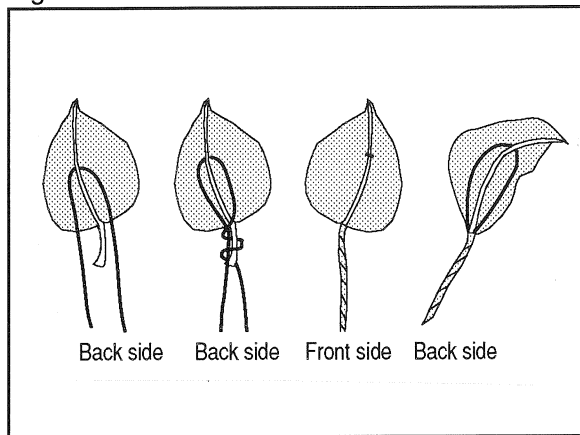
Figure 4.6 - Hairpin Method



To use the stitch method (Figure 4.7), pass a wire through the back of leaf near the central rib and then through the other side, making a small "stitch." The stitch should be made midway up the leaf blade. Bend the ends of the wire down

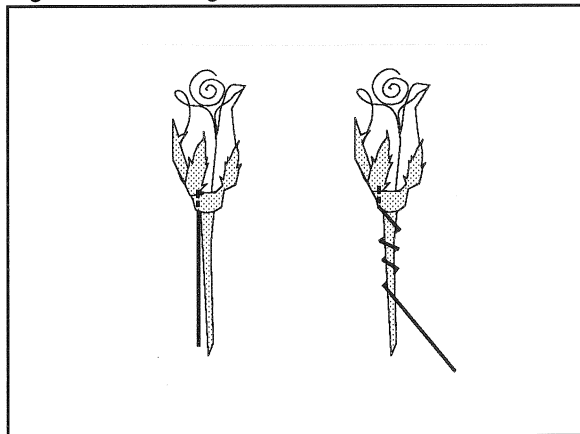
beside the rib to support the leaf. Wrap one end of the wire around the stem and the other end of the wire to secure it. The stitch method is used for foliage with broad leaves, such as camellia and ivy.

Figure 4.7 - Stitch Method



The straight-wire method (Figure 4.8), or splinting method, strengthens the stems of flowers instead of replacing them. To use the straight-wire method, stick the end of the wire into the base of the flower, then wind it down the stem between the leaves. The straight-wire method is used to support the necks of roses. It is often used for flowers to be arranged in vases.

Figure 4.8 - Straight-Wire Method



Floral Tape

Floral tape, or florist's tape, is crepe paper with a light waxy coating. When stretched, it will adhere to itself. It is used in corsages to cover the floral

wire. It secures the wire to the flower stem, tapes flowers together, and holds moisture around the stem ends.

Floral tape is available in quite a few colors, but florists mostly use moss green because it blends well with green foliage. White tape is often used for wedding pieces and brown for dried flowers. Floral tape comes on plastic spools and in several widths, but the most commonly used width is 1/2".

Using Floral Tape

Hold the flower in the left hand and the tape in the right. Switch the placement of the flower and tape if left-handed. When taping a flower, begin at the flower's calyx, and wrap around it tightly. Turn the flower with the left hand while stretching and pulling the tape at a downward angle with the right hand. The tape should be smooth and not bulky.

Summary

Flowers may be wired or taped for use in floral designs. The designer chooses which wiring method to use based on the type of flower and/or purpose for wiring. Taping is used when constructing corsages.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Redbook Florist Services Editorial Advisory Committee. *Basic Floral Design*. 2nd ed. Paragould, AR: Redbook Florist Services, 1993.

Stratman, Teresa. *Retail Floriculture, Book 2*. Columbus: Ohio State University, 1976.

Woodhull, James; Valerie Brosey; Petel Kreysa. *A Catalog of Performance Objectives and Performance Guides for the Floriculture Worker, Retail Flower Shop Salesperson, and Floral Designer*. College Park: University of Maryland Department of ITOE, 1984.

**Lesson 5:
Packaging Flowers and
Arrangements for Delivery**

All products that leave a flower shop should be attractively wrapped. Properly wrapping flowers and arrangements for delivery not only adds to the attractiveness of the product, but also offers protection against physical damage and extreme temperatures during delivery. It allows the delivery person or customer to carry the product more easily as well.

Wrapping and Boxing Cut Flowers for Sale

Cut flowers that have not been arranged and are purchased cash-and-carry are usually wrapped in green waxed tissue paper. This paper is purchased either in a large roll or in sheets 24" x 36". For special holidays, seasonal or multicolored paper is also available.

To wrap cut flowers in paper, follow these steps. (Figure 5.1)

1. Lay a large sheet of green waxed tissue

paper on the worktable.

2. Arrange a few leaves of foliage, such as leatherleaf, pointing toward one corner of the paper.
3. Place flowers on top of the foliage. If possible, avoid piling the heads of flowers on top of each other to keep them from being crushed.
4. Fold the lower corner of the paper up over the stems.
5. Fold in each side, then roll the paper around the flowers. The paper is then cone-shaped and needs to be tightened around the lower end of the stems and flared out at the flower end. Tie a ribbon around the wrap or staple the ends to secure the flowers.

Delicate flowers such as roses are usually boxed for delivery. Boxes may be either white cardboard (Figure 5.2) or clear plastic (Figure 5.3).

To package flowers in a white cardboard box, first line the box with florist paper, extending it out on

Figure 5.1 - Wrapping Technique

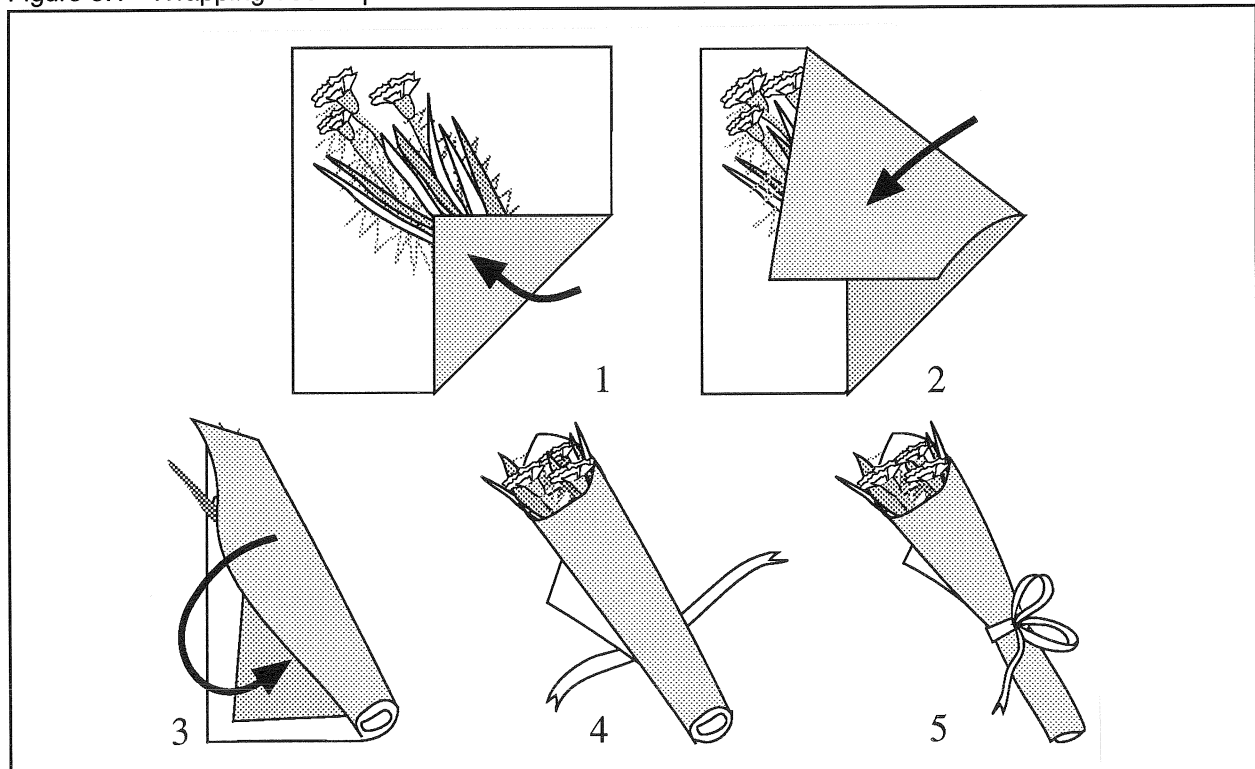
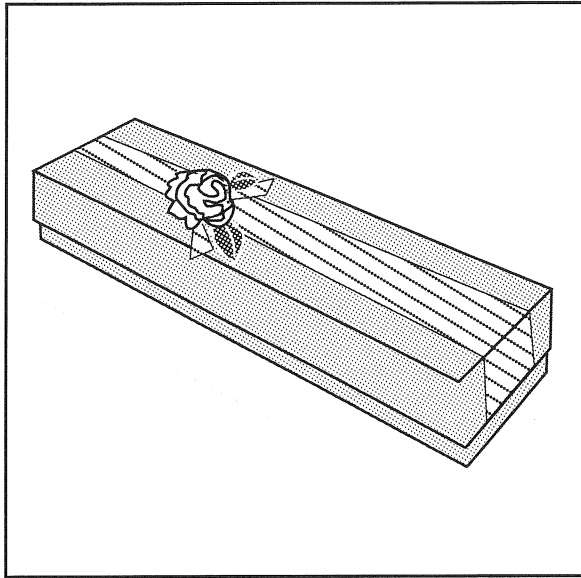


Figure 5.2 - White Cardboard Flower Box



either side of the box. Place a layer of foliage on the bottom of the box. Arrange the flowers on top of the foliage. The flowers should be in rows with as little overlap of heads as possible. If roses are used, a floral pack, which is made of a piece of floral foam soaked in water and covered with foil, may be secured to the bottom and the stems inserted. Water picks may also be placed on the stem of each flower.

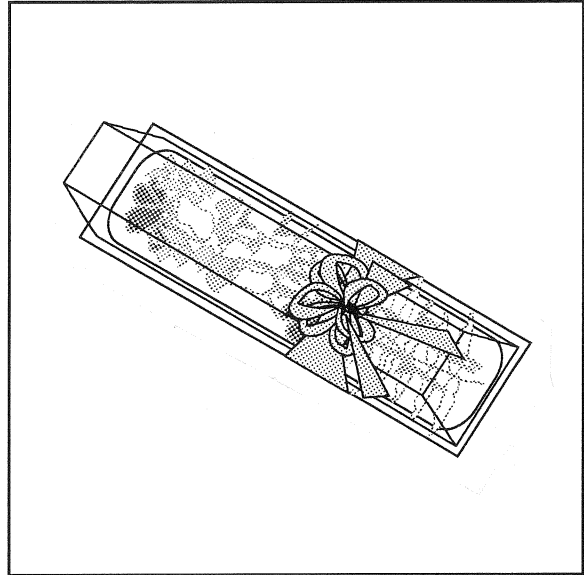
To help keep the flowers and foliage fresh longer, mist them lightly with water. Place a care tag in the box with a pack of floral preservative. Fold the paper over the flowers and foliage, then add the lid to the box. Secure the box with ribbon or tape. Add a bow and an enclosure card for delivery.

To package flowers in a clear box, first line the bottom of the box with foliage. Layer flowers on top of the foliage, avoiding the overlap of flower heads. Use foam or water picks if the flowers are fragile, such as roses. Mist the flowers and foliage with water. Snap the box shut, then add the bow and enclosure card.

Protecting Designs during Transportation

Floral arrangements are often wrapped for delivery, especially if the weather is very cold. They are usually wrapped in florist green waxed tissue paper.

Figure 5.3 - Clear Plastic Flower Box



1. Set the arrangement in the center of a large piece of green waxed tissue paper.
2. Gather the four corners.
3. Staple at the top, avoiding any flowers or foliage.

A compote (footed container) arrangement should be set in a box specially designed for transporting arrangements or in a box with crumpled paper stuffed around the base of the arrangement.

Some florists place a large plastic sack around arrangements. During warm weather, wrapping may not be necessary.

Dressing Potted Plants

Grooming a plant is the first step in preparing it for sale. Remove all yellow or dying leaves as well as old flowers. They not only look bad, but can also encourage disease. If the pot is dirty, wipe the outside with a damp paper towel. Check the plant for any insect pests. A plant should never be sold with insects on it.

Several suppliers provide care tags. They contain valuable information about the plant. The customer may forget verbal care instructions, but placing a care tag in the pot gives them a quick reference.

Unit IV - Mechanics of Floral Design

Once the plant is properly groomed and in good condition to be sold, the florist will "dress" a plant by wrapping the pot in foil and ribbon. Florist's foil is either polyfoil (two pieces of foil bonded together) or single foil. Polyfoil is much more durable and will not tear apart easily. Single foil is easier to shape to the sides of the pot, but is very fragile and will tear if care is not taken in handling it.

The color of the foil and the ribbon should complement the flower of the potted plant. Cut the foil to the appropriate size for the pot (e.g. 26 inches for a six-inch pot). Some florists fold down the edges of the foil 2 to 3 inches on all four sides. If this method is used, additional foil will be needed. Place the pot on the foil slightly to the front, positioning the plant so its best side faces the front. Make sure that the front of the foil will come up and cover the pot. Work around the left side of the plant with the left hand, gently gathering the foil up and around the pot. With the right hand, gently pull the corners upward while working around the pot. After gathering the foil around the pot, curve the two front corners downward so that they form a frame around the front. Make a bow from either #40 or #9 ribbon. Tie it off with a wired wooden pick. Insert the pick in the growing medium in the front of the pot. Some florists will wrap a length of ribbon from the top of the pot, down the side, under the back and back up the other side, securing it at the top with the pick.

Some plants may come from the grower with a pre-formed speed cover on their pots. The use of these covers saves valuable time.

For more expensive plants, a wicker basket may be used as a cover.

Using Plant Sleeves

Wrapping flowering potted plants and foliage plants is most easily accomplished by using plant sleeves. Plant sleeves are pieces of plastic, fiber mesh, or paper shaped into a cone. Select a sleeve size to fit the plant. It should fit closely, but not be too tight on the plant. Slip the plant into the sleeve, fold the top over, then staple it shut. The process is made easier by using a sleeving stand made especially for this process. A sleeve stand is a vertical rod about 36 inches high with a small

disk or circle at the top on which to rest the pot. To use the sleeving stand, pull the sleeve up around the plant, turn the top edges of the sleeve under $\frac{1}{2}$ ", roll them down several times, and staple them. The sleeve protects the potted plant during delivery and from cold weather. If it is extremely cold, double sleeving may be necessary. Plant sleeves may also be used to deliver floral arrangements.

Always make sure the enclosure card is attached to the plant on the inside of the sleeve and all pertinent delivery instructions are securely stapled to the outside.

Summary

Properly packaging flowers and arrangements ensures that they will be in good condition for the customer or recipient of a delivery. Cut flowers should be either wrapped or boxed for delivery. Floral designs must also be wrapped appropriately for delivery in order to protect them. Potted plants should be dressed for sale and prepared for delivery, which can be done most easily by using a plant sleeve.

Credits

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Redbook Florist Services Editorial Advisory Committee. *Floral Design for the Holidays*. Paragould, AR: Redbook Florist Services, 1991.

Stratman, Teresa. *Retail Floriculture, Book 2*. Columbus: Ohio State University, 1976.

Wells, Judith A.; Janet Anderson. *Greenhouse Operation and Management*. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Woodhull, James; Valerie Brosey; Petel Kreysa. *A Catalog of Performance Objectives and Performance Guides for the Floriculture Worker, Retail Flower Shop Salesperson, and Floral Designer*. College Park: University of Maryland Department of ITOE, 1984.

Unit V - Basic Principles of Floral Design

Lesson 1: Identifying Basic Principles of Design

The major work of a florist is designing and arranging flowers. These tasks require special talent. A designer needs to have a knowledge of not only where the arrangement will be used, but also what container would be appropriate and what flowers, foliage, and accessories to use. The most difficult part is being able to combine all of these materials into a pleasing design. In order to do so, the florist must know the principles of arranging and the elements of design.

As James E. Smith points out in Flower Arranging: A Manual, "Flower arranging is an art -- the raw material is already in an advanced stage of design and beauty. The problem is to assemble these forms, line, color, etc. as elements of design into a harmonious composition."

Principles of Floral Arranging

The basic principles of floral arranging are design, balance, scale and proportion, harmony, focal point, accent, rhythm, repetition, and unity. No one principle is more important than any of the others.

Design - Design is a planned organization of elements to suit a specific purpose. The key is that it is a **planned** process. Designing involves thinking about the design, observing other designs, and finally practicing the design. Following this process will strengthen the ability to design.

Balance - Balance means stability. If a design is unbalanced, people feel dissatisfied. An arrangement lacks balance if it looks like it is about to fall over.

Scale and proportion - Scale is the relationship of one part of the arrangement to another. Proportion refers to the entire arrangement and its relationship to the area in which it is placed. To help achieve scale and proportion, do not use very large and very small flowers together or overly large flowers in very small containers.

Harmony - Harmony is achieved by mixing all the elements in the arrangement together. The major

use of harmony is with colors that are pleasing together.

Focal point - The focal point is the major point of emphasis in the arrangement. It should be toward the bottom and center of the arrangement. To be effective, the focal point should draw attention to that area. This goal is usually achieved by placing the largest flowers or the brightest colors there.

Accent - Accent is emphasis. By using contrasting colors, sizes, or textures in an arrangement, a designer can accent a design. It should not detract from the focal point, however.

Rhythm - Rhythm is the movement produced by the arrangement. Rhythm is produced by repeating shapes, forms, or lines or by using small, medium, and large flowers. It can also be produced by using a line movement throughout an arrangement.

Repetition - Repetition is needed to keep the balance and rhythm of an arrangement. This end can be achieved by repeating the use of the same flower and/or color or even certain accessories.

Unity - Unity is the final principle that makes all of the other parts fit together. Combining the parts and tying them all together into an entire arrangement is essential.

Elements of Design

The basic elements of design are line, form, pattern, texture, and color.

Line - Line is the underlying skeleton or linear pattern that holds the arrangement together. Designers must know what line they are going to use before even starting an arrangement. The lines may be straight, horizontal, vertical, or curving. Horizontal lines reflect tranquility and peace, vertical lines are dignified. Curved lines give a sense of movement.

Form - Form represents the three-dimensional shape of the arrangement. The basic forms of arrangements can be triangular, horizontal, vertical, L-shaped, inverted-T, or curving.

Floristry

Pattern - Pattern is the outline of a design. It is sometimes seen as the shadow.

Texture - Texture is the surface appearance of the materials used in the arrangement. Different flowers are regarded as having different textures. For example, some garden flowers, such as zinnias, are considered to be coarsely textured, while roses are considered to be finely textured. The textures of all the components in the arrangement must combine with each other in a pleasing relationship.

Color - Color is probably the single most important aspect of the design. It is one of the main reasons why flowers are so popular. Many colors are known to affect the moods of people. Yellows, reds, and oranges have an uplifting effect, while the cooler colors of greens and blues have a calming effect.

Color Harmonies

A color wheel is an important tool for a florist. By using a color wheel, the florist can determine which colors are complementary to each other. The six major types of color harmony are monochromatic, analogous, direct complementary, split complementary, triad, and polychromatic.

Monochromatic color harmony is obtained by using various tints, tones, and shades of one color. A tint is a hue (pure color) with white added to it. A tone is a hue plus gray, while a shade is the hue plus black. A good example of monochromatic color harmony would involve light blue, blue, and dark blue or navy.

Analogous color harmony is achieved by using two or three colors near each other on the color wheel. An example is grouping red, red-violet, and violet together.

Direct complementary colors are located directly opposite each other on the color wheel. A good example is orange and blue.

Split complementary colors include one color grouped with the colors on each side of the complementary color. For example, yellow orange, yellow green, and violet are split complementary colors.

Triad harmonies are three colors that are equidistant from each other on the color wheel. Red, yellow, and blue are a triad. One color should be dominant.

Polychromatic groupings are obtained by using many colors; however, one color should always be dominant.

Rules of Design

A designer need not always strictly adhere to rules of design. When first beginning, however, designers should keep a few basic rules in mind.

- The arrangement should be 1½ to 2 times the height or length of the container.
- Do not use more than four colors in an arrangement.
- Do not use more than three kinds of flowers in an arrangement.
- Keep large flowers toward the bottom and center of the arrangement and small flowers toward the top and edges.
- Do not crowd flowers together.
- Place dark colors toward the bottom of the arrangement.
- If the flowers in an arrangement are all the same size, maintain a ratio of three light flowers for every dark flower.
- If using less than twelve flowers in an arrangement, use an odd number of them.
- A flower or leaf should be used to interrupt the line of the container.

Summary

Designers need to know and be able to incorporate the principles of floral arranging in their work. In order to create effective designs, they must learn the various elements of design and the color harmonies. The beginning designer should follow the basic rules of design, but the more experienced designer may sometimes disregard them.

Credits

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Unit V - Basic Principles of Floral Design

Lesson 2: Identifying Design Shapes

All floral designs begin with an idea of what general shape they will follow when completed. Many different design shapes exist, but some are much more widely used than others. Newer, more contemporary "high style" design shapes are emerging in anticipation of the future of floral design.

Straight-Line Arrangements

The basic straight-line arrangements are horizontal, vertical, inverted-T, symmetrical triangle, asymmetrical triangle, and right angle. See Figure 2.1.

The horizontal arrangement is low and flat with a long horizontal line. It is most often used for table centerpieces because it allows dinner guests to see over it.

The vertical arrangement is oriented straight up. The height of the arrangement is twice the height of the container, sometimes even higher.

However, it should not be wider than the width of the container to be a true vertical arrangement.

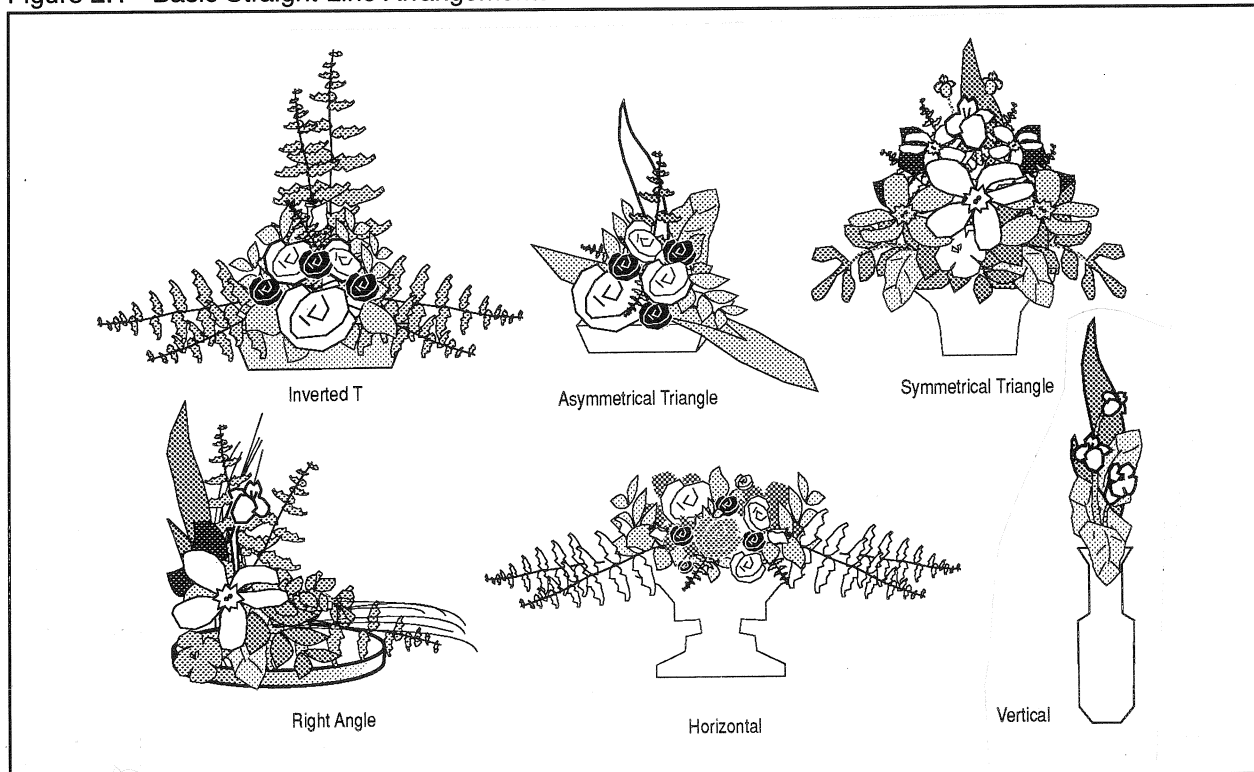
An inverted-T arrangement is a combination of the horizontal and the vertical. The lines are not filled in but are allowed to dominate the arrangement.

The symmetrical triangle arrangement is a very formal design. It must be equal on both sides, so that if a line were cut down the middle, both sides would be the same.

The asymmetrical triangle arrangement has unequal sides and angles but is still balanced.

The right angle arrangement is also called an L-shaped arrangement. It is characterized by a tall vertical line with a horizontal line on one side. The horizontal line can run either right or left. Two matching arrangements using a right angle are often made to be placed on opposite sides of a focal point, such as a wedding cake.

Figure 2.1 - Basic Straight-Line Arrangements



Floristry

Curved Arrangements

The basic curved arrangements are the hogarth, circle, crescent, and oval. See Figure 2.2.

The Hogarth curve has a serpentine line, giving the arrangement a "lazy S" shape. This curve was referred to as the "line of beauty" by the English artist William Hogarth, from whom it takes its name.

A circle design is round, the same on all sides. For this reason, it is often used for centerpieces for smaller tables.

The crescent arrangement resembles a half moon. The focal point is low and near the center of the crescent.

An oval arrangement is similar to the circle but is elongated and egg-shaped.

Contemporary Designs and Techniques

Many different newer designs and techniques are used by florists. Some of the different categories of designs are the traditional or classical, the naturalistic, the linear, and the modernistic or experimental. They all include various designs.

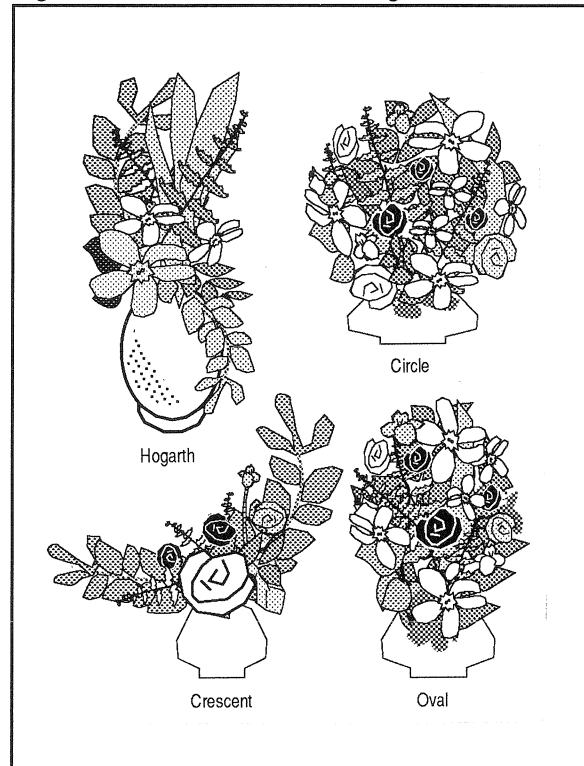
The traditional or classical designs are the mille fleurs, the Biedermeier, the phoenix, and the waterfall.

Mille fleurs literally means a thousand flowers. Sometimes referred to as the mille de fleurs, this free flowing and naturalistic design incorporates many different flowers and colors.

The Biedermeier is a compact conical arrangement with the flowers placed in rows. Each row is comprised of the same flower. The top flower is usually a very fragrant flower. This arrangement is very formal.

The phoenix arrangement is named after the mythological bird. The legendary phoenix lived 400 to 500 years, burned itself up, and then rose from the ashes to live another 400 to 500 years. This style has a mound of flowers with tall flowers or branches coming from the center of the arrangement to represent the phoenix rising from

Figure 2.2 - Basic Curved Arrangements



the ashes.

The waterfall design has a cascade of flowers tumbling down the side of the arrangement, representing falling water. This style was originally created for bridal bouquets. Sometimes feathers and pieces of yarn are also incorporated in the arrangement. Small mirrors or bits of foil can also be added, representing the sunlight on the water. This arrangement is very free flowing, with all of the flowers and foliage appearing to come from the center.

The naturalistic designs include botanical, vegetative, and landscape arrangements.

A botanical arrangement has one main flower that is represented throughout the five phases of its life: stem, blossom, foliage, buds, and bulbs or roots.

The botanical arrangement is considered a study of the main flower. Other plants that appear in the main flower's environment may also be added, with the base often being moss, stone, or water.

Unit V - Basic Principles of Floral Design

A vegetative arrangement represents flowers in their natural setting. The flowers that grow taller are the tallest in the arrangement, while the shorter flowers are the shortest. It also groups flowers that bloom at the same time. The vegetative arrangement is usually constructed so that it can be viewed from all sides.

While it is very similar to the vegetative, the landscape arrangement encompasses nature on a greater scale, including representations of the various elements that form a landscape. It is usually one-sided.

The linear designs consist of western, parallel system, new convention, and formal linear arrangements.

Western is a general term for line arrangements that are symmetrical or asymmetrical. The body of the arrangement is not filled in, leaving the line very open and bringing out the strong lines. The flower stems all appear to be coming from one central point.

The parallel system is a vertical design that has groups of flowers and foliage, with each group being one type of flower or greenery. The stems in each group are parallel to each other. This design makes use of negative space. The base should be covered with moss, rocks, or water.

The new convention design is similar to the parallel system, but it uses horizontal lines as well as vertical groupings. Vertical flowers and foliage are repeated low in the design with flowers placed horizontally at right angles to them.

The formal linear design is based on very clear lines and distinct forms. This style is also called high style. The emphasis is placed on line, which is accented by the sparse use of flowers and foliage. This style uses a great amount of negative space.

The modernistic or experimental designs include sheltered, pavé, pillowing, new wave, and abstract arrangements. They are all new and modern trends.

In a sheltered design, parts of the design are sheltered and hidden from first viewing. Often the design will be inside the container, and the viewer must look down into the container to be able to see the arrangement. Foliage can also be used to shelter or hide parts of the arrangement.

Pavé is the name of a style of jewelry making in which the gems are tightly arranged next to each other so that no metal shows. In a pavé arrangement, groups of flowers are packed closely together in a low, flat pattern. The different groups should contrast in color.

Pillowing involves having small tufts of flowers in little groups coming from different areas in the arrangement.

The new wave design is a newer, experimental trend. This design uses material that has been sprayed, dyed, curved, braided, or changed in some way, usually in an unnatural manner. New wave arrangements are often very unusual in appearance, with no rules applying to their design.

An abstract arrangement is a very free form, free flowing design. These arrangements are usually unrealistic; the plants used are generally manipulated in some unnatural way.

Summary

Designers must know the design shapes that they may use in creating floral arrangements, including straight-line, curved, and contemporary designs.

Credits

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Morley, Jim, ed. *The Professional Floral Design Manual*. 2nd ed. Oklahoma City: American Floral Services, 1990.

Redbook Florist Services Editorial Advisory Committee. *Advanced Floral Design*. Paragould, AR: Redbook Florist Services, 1992.

Lesson 1: Uses of Floral Designs

Floral designs have many uses. Occasions such as weddings and funerals make use of specialized designs, while people also use flowers in their homes and businesses every day.

Floral Designs in the Home

Floral designs are used in many places in the home, usually limited only by the imagination or the space in which to place them. The most traditional place for a centerpiece is on the dining room table. This arrangement must be constructed to be seen from all sides and be low enough not to interfere with conversation at the table. It should also be low enough not to obstruct vision when someone is seated.

Centerpieces are used at various other places in the home where the design will be seen from all sides. A centerpiece might be placed on a coffee table, for example.

A fireplace mantle is another attractive location for a floral design. If two arrangements are used to decorate the mantle, they will usually be asymmetrical triangles. Smaller arrangements can be used on end tables, bedroom night stands, or vanities. Some flower arrangements can even be used on a bathroom vanity, provided there is enough space.

A tall thin arrangement can be placed by the front entryway into the home. Some arrangements can be placed on a piano. Designs can also be displayed on doors and walls.

Wedding Designs

Weddings are one of the most important uses for flowers. Some of the different types of designs used for weddings are listed below.

The bridal bouquet and attendant flowers are traditionally one of several types. The cascade, or long flowing style, is popular with many brides, but the colonial or nosegay styles are also popular. See Figure 1.1. Some brides like to carry arm bouquets. Flowers can also be arranged on Bibles, fans, or parasols to be carried in the

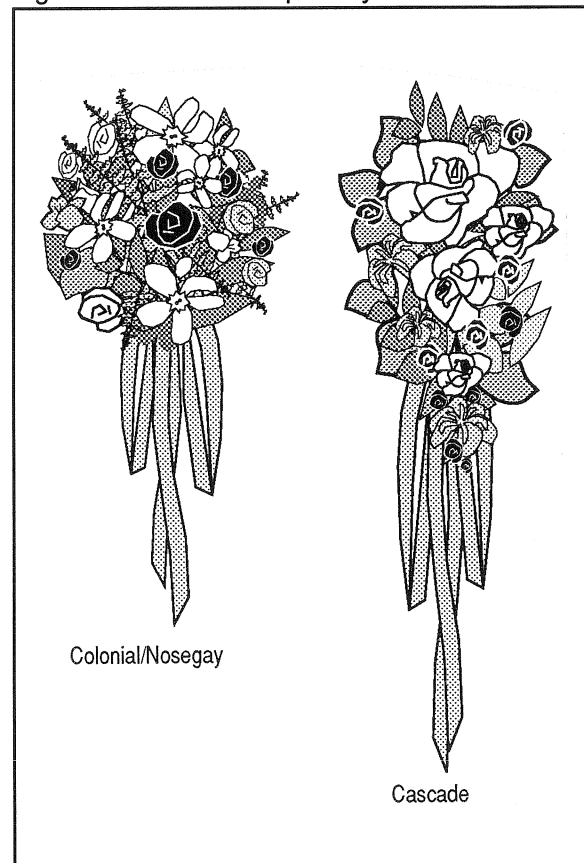
ceremony. The flowers of the attendants are traditionally more colorful, and they carry out the color theme of the wedding.

All members of the wedding party wear corsages or boutonnieres. Anyone who helps with the wedding should be identified with a flower.

The ring bearer, in addition to wearing a boutonniere, will often carry a pillow with a replica of the rings and a small floral design attached. The flower girl carries a basket of petals with flowers on the side or, if the church does not allow the dropping of petals, with a design in the basket.

Ceremony designs can be placed in a number of locations. Traditionally, a large arrangement of flowers is placed directly in the center of the altar. Twin arrangements are sometimes placed on either side of the altar. Floral decorations can be used for the candelabra, kneeling bench, canopy, Virgin Mary statue, unity candle, guest book, aisle runner, and aisle.

Figure 1.1 - Bridal Bouquet Styles



Floristry

Flowers used in the reception include cake flowers and decorations for the punch table, gift table, buffet or food table, and individual tables.

Cake flowers can be used on the top of the cake in place of a traditional cake topper, or if a topper is used, flowers and foliage can be placed around it. Depending on the style of the cake, flowers and/or foliage can be added to each layer, between each layer, or around the base of the cake.

Funeral Designs

Floral designs used for funerals fall into several major types.

Casket sprays are designed in both full and half sizes, depending on the style of the casket and whether it will be closed or open. If the casket is closed, a full casket spray that covers the entire casket is used. These sprays are usually constructed on pieces referred to as saddles that hold two blocks of floral foam. The casket spray should not be taller than 8" or 9". If the casket is open, the spray should curve down over the side. Figure 1.2 shows a half casket spray. A half casket spray uses a smaller saddle and only one block of floral foam. It is not symmetrical but has the majority or larger mass of flowers at the open end, tapering off to the end of the casket.

A casket garland is a roping of flowers and foliage that can be draped across the casket if it is open or closed.

A casket scarf is constructed on a piece of material and draped over the casket either side-to-side or front-to-back.

A casket blanket is constructed on a piece of material, which is covered entirely with greens and blossoms. It completely covers the top of the casket.

Flowers placed inside the casket can take several forms, such as a corsage or boutonniere, flowers on a Bible, or flowers in the hand. These designs are usually small floral pieces sent by the grandchildren or children.

Standing sprays, or easel sprays, are one-sided designs that are created in a plastic cage with floral foam and displayed on a wooden or metal easel. Figure 1.3 is one example of a standing spray.

A flat spray is constructed in Styrofoam™ or by tying a large group of flowers and foliage together. If large numbers of these have been sent for the service, they can sometimes be combined and displayed on a wall behind the casket as a wall of sprays.

Figure 1.2 - Half Casket Spray

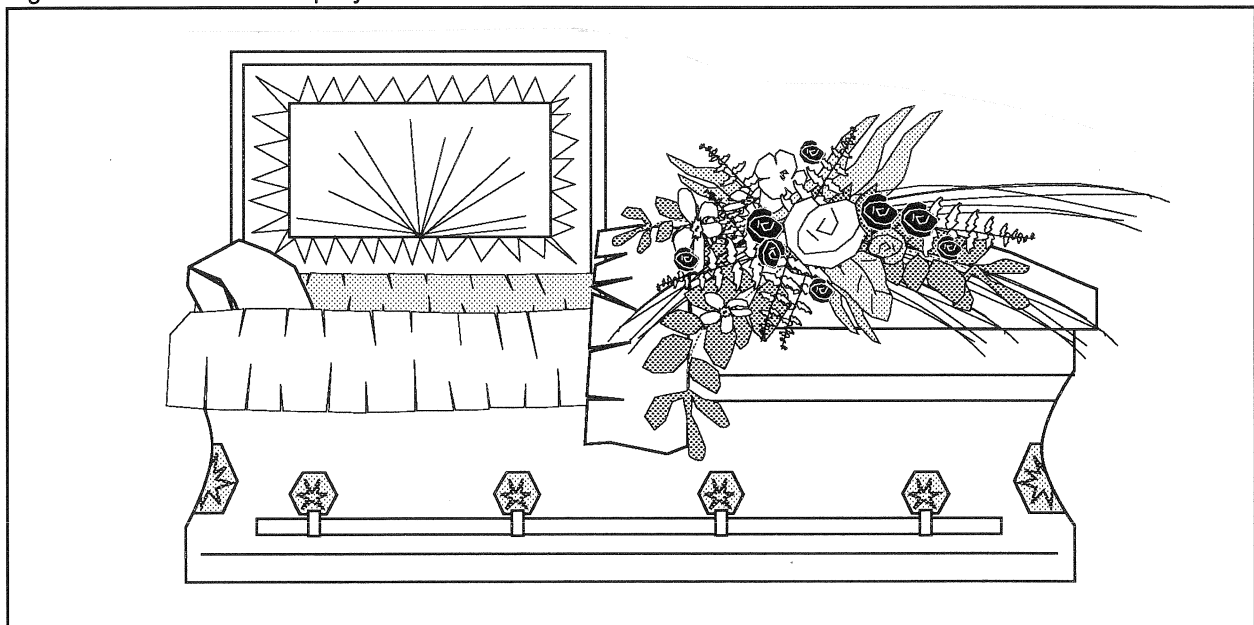
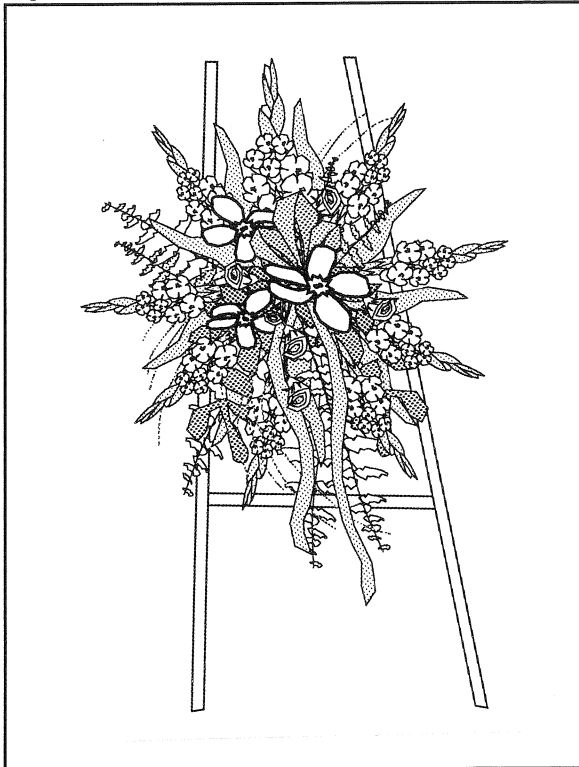


Figure 1.3 - Standing Spray



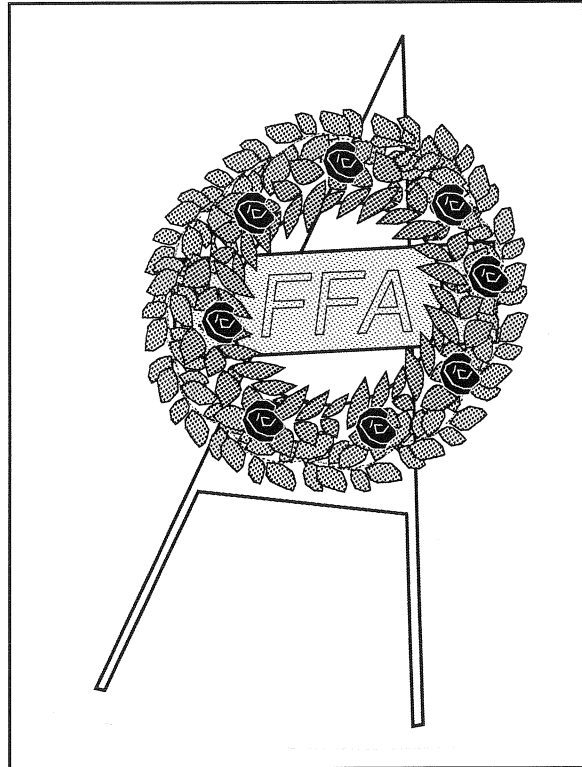
Basket arrangements can be made in wicker, plastic, or papier-mâché containers.

Pedestal arrangements are large arrangements displayed on a pedestal. They are usually sent by close family or friends, often by several families together. A pedestal arrangement is placed at the head or foot of the casket.

Set pieces are designs constructed in special shapes such as a cross, heart, or pillow. They can also represent an organization (Figure 1.4) or lodge. Usually, the shape is cut from Styrofoam™, and then flowers and foliage are glued or fastened to it.

Wreaths can take several forms. Some can be made of Styrofoam™ covered with foliage with a design added to one section. Wreath forms can be purchased that are constructed of floral foam and can be filled with flowers and foliage. Ribbon can be wound around a Styrofoam™ wreath frame with a bow and flowers added. Wreaths can also be constructed of grape vines or eucalyptus and decorated with bows and flowers.

Figure 1.4 - Set Piece



Flowering potted plants are also popular items to send for funerals. They are usually decorated with coordinating foil and ribbon.

Dish gardens, which contain a variety of potted plants, can be sent to a funeral, but they are more often sent to the home of the family.

Wearing Flowers

Flowers can be worn in a variety of ways. The most common "body flowers," or floral designs that are worn, are corsages and boutonnieres. However, flowers can also be worn as a lei, a type of garland that is Hawaiian in origin and is worn around the neck. For special occasions, flowers may be worn in the hair, either pinned directly to the hair or in the form of floral designs attached to barrettes or combs. Floral pieces may also be attached to hats and veils for occasions such as weddings.

When designing flowers to wear, make sure that designs are a suitable shape and size and that they are not too heavy to be worn comfortably.

Customizing Designs for Holidays

Designs can easily be customized for holidays and special occasions. One of the easier ways is to add accessories such as seasonal picks, ribbons in appropriate holiday colors or designs, and chenille in seasonal shapes.

Some flowers and foliage are identified with a particular season. The addition of holly or evergreens to an arrangement will instantly identify it as a Christmas arrangement. Easter and Easter lilies are also closely associated.

Summary

Flowers are an important part of people's lives, not only during holidays and for special occasions such as weddings and funerals, but for everyday

use as well. They can be used to express many sentiments, such as joy, sorrow, and congratulations.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Woodhull, James; Valerie Brosey; Petel Kreysa. *A Catalog of Performance Objectives and Performance Guides for the Floriculture Worker, Retail Flower Shop Salesperson, and Floral Designer*. College Park: University of Maryland Department of ITOE, 1984.

Lesson 2: Corsages and Boutonnieres

Flowers have been used as methods of decoration since ancient times. Today, flowers usually are worn for special occasions such as weddings. The flowers that women wear are referred to as corsages, and the flowers that men wear are called boutonnieres.

Corsages

Corsages can be worn in a variety of ways. Most commonly, they are worn on the left shoulder. They should curve slightly over the shoulder and be worn upright, the way the flowers grow in nature. Wrist corsages are popular for certain occasions. Remember to keep wrist corsages small and construct them from more durable flowers than those in a shoulder corsage.

For some special occasions, small corsages can be constructed and then taped onto a hair comb or barrette. Occasionally, a corsage will be pinned to a belt around the waist. Some women wear them on a ribbon around their neck or ankle.

If a woman does not want to wear a corsage, a good alternative is to carry the corsage or to pin it on her purse.

Parts of a Corsage

Corsages consist of six basic parts: flowers, foliage, filler, wire, tape, and a bow.

Flowers - Roses and carnations are the most widely used flowers for corsages. Almost any flower can be used, provided that it will hold up well and will not wilt if it is without water for an extended period of time. It must not be too delicate (it should not fall apart if it is bumped or shaken) or too large to be worn. It must also be appropriate for the occasion.

Foliage - Leatherleaf fern is probably the most popular foliage used in corsages. Again, any foliage can be used as long as it is not too delicate and will hold up well.

Filler - Filler is not always necessary, but it often makes the corsage more attractive. The most

commonly used filler is baby's breath. Any filler can be used as long as it is durable and has longevity.

Wire - Wire is necessary to replace the stems of the flowers. Always use the lightest weight wire possible in order to keep the corsage lightweight.

Floral tape - Tape is used to bind the flower to the wire and tape together the flowers, foliage, filler, and bow, covering the wires.

Bow - A bow should be made in a color that complements the color of the flowers. The bow should be an appropriate size for the finished corsage and should always be kept in scale with the corsage. A bow is just an accessory and should not overpower or draw attention away from the flowers.

Constructing Corsages

Different corsages are constructed in different ways, largely depending on the number of flowers included in the corsage.

To construct a single-flower corsage:

1. Prepare the flower by wiring and taping. Remember to tape flowers halfway up the calyx.
2. Add filler to the back of the flower.
3. Add foliage to the back of the filler.
4. Tape all three together.
5. Add a bow that has been tied off with wire. Twist this wire around the wire of the flower.
6. Cut off the excess wire, leaving about 1½" to 2" of wire. Make sure the wires are taped.
7. Shape the wire into the desired shape.
8. Put a corsage pin in the corsage at an angle so that the pointed end is not exposed.
9. Place the corsage in a bag or box.

To construct a two-flower corsage:

NOTE: Usually carnations or cymbidium orchids are used, so these corsages are larger.

1. Make two one-flower corsages, but leave the smaller of the two flowers with a longer, stronger stem.

Floristry

2. Place the smaller flower just above the other flower.
3. Wrap and tape the wires together.
4. Add a bow, usually under the second flower.
5. Trim the stem to about 2". Shape the stem.
6. Always include at least two corsage pins with this larger corsage.
7. Place the corsage in a bag or box.

To construct a three-flower corsage:

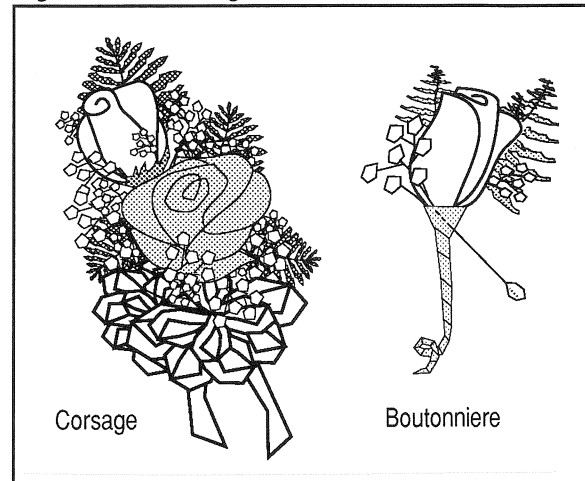
1. Wire and tape three flowers in graduating sizes.
2. Place the bud the highest, the second largest flower right under it, and the largest flower slightly under this one.
3. Tape filler behind each.
4. Add foliage behind filler.
5. Tape all three layers together.
6. Add a bow under the three flowers.
7. Trim the stem to about 2". Shape the stem.
8. Always include at least two corsage pins with this larger corsage.
9. Put the corsage in a bag or box.

To construct a five-flower corsage:

1. Make a three-flower corsage and a two-flower corsage
2. Place the corsages together at the stem ends. The stem of the two-flower corsage should be bent so that it will lay flat against the stem of the three-flower corsage. Wrap all the stems together, being sure not to leave too large a space between the two groups of flowers.
3. Tie the bow with ribbon in between the two groups, eliminating the necessity of taping again.
4. Trim the stem to about 2". Shape the stem.
5. Always include at least two corsage pins with this larger corsage.
6. Put the corsage in a bag or box.

Flowers to be worn can have a wide variety of uses. When creating a floral design to wear, the florist must be sure to keep a number of basic principles in mind. Use the smallest wire possible. Keep corsages and boutonnieres as lightweight as possible. If using accessories, keep them simple. Remember, they are used only for the enhancement of the design.

Figure 2.1 - Corsage and Boutonniere



Corsages and Boutonnieres

Corsages and boutonnieres are quite similar, but they do have a few differences. Boutonnieres are worn by men on their lapel, usually close to the buttonhole. Boutonnieres are smaller than corsages (Figure 2.1). Generally, a boutonniere is composed of only one flower or a composite of several small ones. Roses or carnations are commonly used in single-flower boutonnieres. The pins used to hold boutonnieres have smaller heads and are shorter than corsage pins. Corsages are worn by women, usually on the left shoulder. Corsages are usually larger than boutonnieres and have more flowers and a bow.

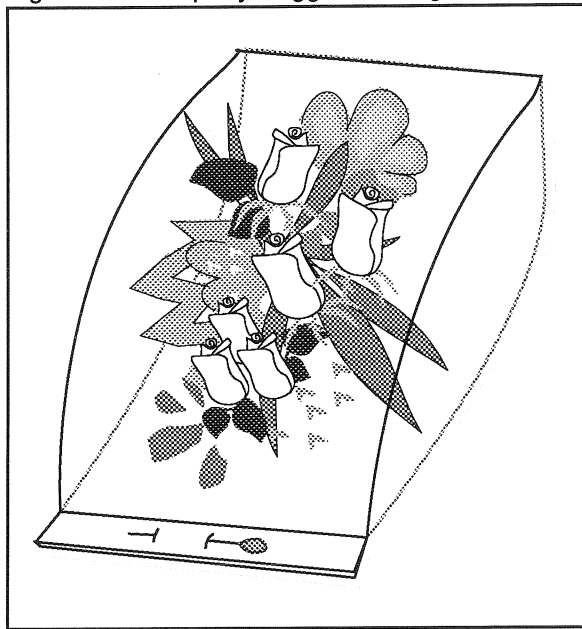
Packaging a Corsage

The packing and handling of corsages and boutonnieres are important for the flowers' ability to last and for customer satisfaction.

Corsages can be placed in cellophane (plastic) bags, clear plastic boxes, or cardboard boxes, depending on the budget of the florist.

If using a cellophane bag, mist the inside of the bag before placing the corsage inside. Try not to mist the flower directly, but only the interior of the bag. When placing the corsage in the bag, make sure the seam in the bag is to the back. Neatly fold the bag closed. In order to keep the bag closed, insert another corsage pin in the seam or staple it (Figure 2.2).

Figure 2.2 - Properly Bagged Corsage



If using a clear plastic or cardboard box, line the box with Easter grass or green waxed paper. Close the lid securely.

Summary

Corsages and boutonnieres are often sold for special occasions. Florists must therefore be able to construct them both, as well as corsages consisting of different numbers of flowers. Proper packaging is also important to ensure that corsages and boutonnieres are in good condition for the customer.

Credits

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Stratman, Teresa. *Retail Floriculture, Book 2*. Columbus: Ohio State University, 1976.

Lesson 3: Bud Vases

A bud vase is one of the major types of arrangements that florists produce, and it is the most simple vertical design. Bud vases are excellent cash-and-carry arrangements, and every florist should have several in the cooler at all times. They are usually inexpensive and easy for customers to carry home. Their major use is as gifts, usually in hospital rooms, on office desks, or for other areas without much space.

Bud vases are usually of a simple design and require only one or a few flowers. The number of flowers to use depends partly on the size of the opening at the top of the vase. A simple test to determine this number is to insert a thumb into the neck of the base. If it barely fits in, only one or two stems of plant material can be used.

Bud vase containers are tall, narrow, and usually clear, white, or green glass, but they can also be plastic and in a rainbow of colors. Customers may request a certain type of bud vase.

Bud vases are usually designed to be viewed from just one side.

Constructing a Bud Vase

1. Select a container. Make sure it is clean.
2. Fill it with water to which a preservative has been added.
3. Place the major flowers to establish the basic height. The height is generally 1½ to 2 times the height of the container, so the tallest flower in a standard eight-inch bud vase would be 16 inches tall. If using more than one flower, vary the height of the flowers so that they are evenly spaced out with the tallest. Remember that if flowers of varying sizes are used, the largest should

be placed at the bottom of the arrangement, while the smallest should be placed highest.

4. Add foliage, using two pieces that are slightly taller than the flowers and a few shorter pieces to the side. If leatherleaf is used, it is helpful to place the foliage back to back in order to hold it straight. Other foliages can also be used with the leatherleaf or substituted for it. Use enough foliage stems to hold the flowers in place.
5. Add filler flowers if desired. Baby's breath is frequently used, but statice, latifolium, Queen Ann's lace, and other fillers also work well.
6. A bow may be added as an accent. A #3 ribbon is usually used. Wire it onto a wooden pick, a flower, or a foliage stem and place it slightly above the edge of the vase.

It is important to keep the number and size of the flowers in proportion to the size of the vase.

Summary

Since bud vases are frequently purchased by customers, florists need to know how to construct them in order to produce these very popular arrangements both quickly and efficiently.

Credits

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Redbook Florist Services Editorial Advisory Committee. *Basic Floral Design*. 2nd ed. Paragould, AR: Redbook Florist Services, 1993.

Lesson 4: One-sided Arrangements

The one-sided arrangement is placed where it will not be viewed from all sides.

Constructing a One-sided Arrangement

Some of the supplies needed to construct a one-sided arrangement include a container, floral foam, flowers, filler, foliage, and floral shears or a knife. Waterproof tape, wire, and wire cutters may also be needed.

Choose the line or shape of the arrangement - First, choose the line or shape and the size of the arrangement. These factors influence all of the other decisions. Where the arrangement will be placed is of utmost importance and will influence the shape and size. The customer may set a dollar range for the arrangement, which also affects size, type of flowers used, etc.

Select flowers and foliage - Select flowers, filler, and foliage that will complement the area where the arrangement will be placed. Choose plant materials that will easily adapt to the shape used.

Select a container - The selection of a container is equally important, because it must be in scale with the size of the arrangement and in keeping with its shape and the colors of the flowers. The style of the area will also somewhat determine which container is chosen. For example, an informal basket would not normally be used for an arrangement to be placed in a formal living room.

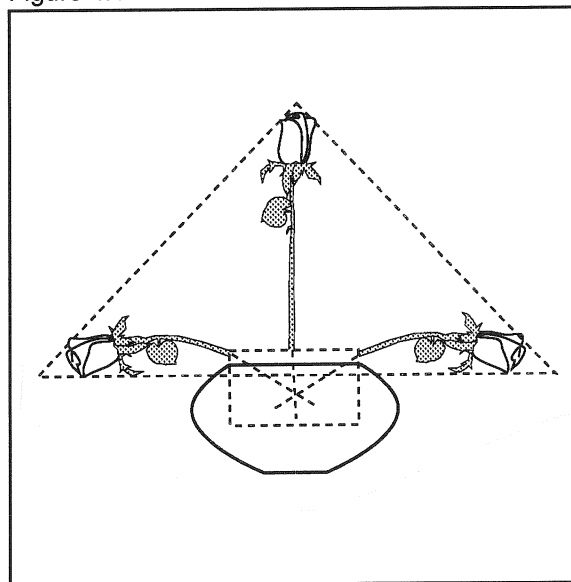
Prepare floral foam - Prepare floral foam by soaking it in water with a preservative.

Cut the foam to fit the container. Do this with a knife or a piece of thin wire. Remember, there should be a small well of water, or room between the block of foam and the container to fill with water. Leave the foam extending about an inch above the top of the container, allowing stems to be inserted horizontally.

Secure the foam in the container, using waterproof tape if necessary. Add water with a preservative to the container.

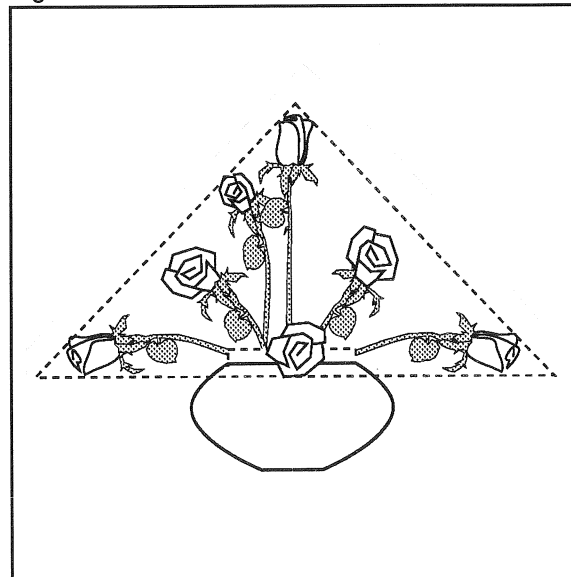
Establish lines - The next step is to establish the lines of the arrangement. Do so by outlining the line using the main flowers or the foliage. Be sure to tilt the tallest top stem slightly back from the front of the design. All stems should appear as if they are emerging from the same central point (Figure 4.1).

Figure 4.1 - Establish Lines



Fill in the lines - After establishing the lines, fill them in. Be careful not to crowd the flowers, following the basic rules of design (Figure 4.2).

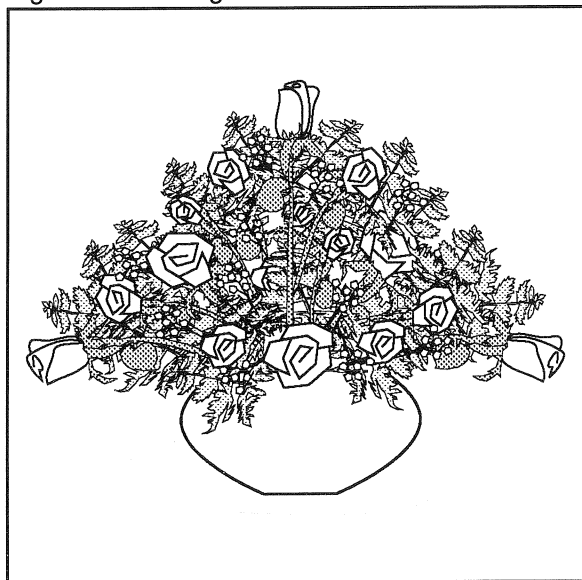
Figure 4.2 - Fill in the Lines



Floristry

Add foliage and filler - Add the foliage and filler next. Filler can help fill in voids and add additional color. The foliage should complement the flowers. The foam should not be visible after the foliage and filler are added (Figure 4.3).

Figure 4.3 - Foliage and Filler Added



Some designers add the foliage before inserting the flowers. This is a matter of personal preference; however, some flower shops will often "green up" a number of containers before a very busy season for increased efficiency in designing arrangements.

If placed in well soaked floral foam and kept cool, foliage will often outlast the flowers in an arrangement.

Finish off the back - When constructing a one-sided arrangement, do not forget to finish off the back. Even though flowers are not added to the back, the floral foam needs to be covered with additional foliage.

Refill the container with water - Lastly, refill the container with water mixed with a preservative. Flowers and foliage will often take up more water, and they should NEVER run out of it.

Summary

Designers should be able to construct an attractive one-sided arrangement. Following the steps given above will allow them to do so efficiently.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Stratman, Teresa. *Retail Floriculture, Book 2*. Columbus: Ohio State University, 1976.

Lesson 5: Centerpieces

Centerpieces are usually designed for dining room tables, but they also can be used on coffee tables or any other place where the arrangement will be viewed from all sides.

Constructing a Centerpiece

Some of the supplies needed to construct a centerpiece include a container, floral foam, flowers, filler, foliage, and floral shears or a knife. Waterproof tape, wire, and wire cutters may also be needed.

Choose the line of the arrangement - First, choose the line or shape and the size of the arrangement. Will it be a circular or oblong centerpiece? These components of the arrangement influence all of the other decisions. Where the centerpiece will be placed is of utmost importance and will also influence its shape and size. Dining room table centerpieces should not be too large, but again, size depends on the size of the table.

Select flowers, filler, and foliage - Select flowers, filler, and foliage that will complement the area where the arrangement will be placed. Choose plant materials that will easily adapt to the shape used.

Select a container - The selection of a container is also important, since it must be in scale with the size and in keeping with the shape of the arrangement and the colors of the flowers. Generally, centerpiece arrangements are made in low, flat containers. The style of the area will somewhat determine which container is chosen. For example, a plastic container would not normally be used for a formal dining room arrangement.

Prepare the floral foam - Prepare floral foam by soaking it in water mixed with a preservative.

With a knife or a piece of thin wire, cut the foam to fit the container. There should be a small well of water or room between the block of foam and the container to fill with water. Leave the foam extending about an inch above the top of the

container to allow stems to be inserted horizontally.

Secure the foam in the container, using waterproof tape if necessary.

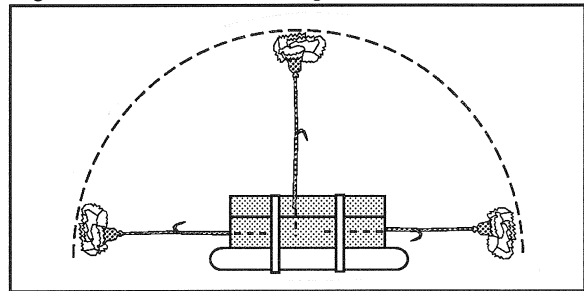
Add water and a preservative to the container.

Establish the lines - The next step is to establish the lines of the arrangement. Do this by outlining the line or shape that the arrangement will follow.

Insert the main or center flower to establish the height of the arrangement. Make sure this flower is low enough that guests seated at the dining room table can easily see over it so that it does not interfere with conversation at the table. The center flower is usually no taller than 12 to 14 inches. All stems should appear to be emerging from the same central point.

Insert two flowers at the furthest lengths of the arrangement (Figure 5.1). Their lengths will be determined by the length of the table. A centerpiece is usually about one-third the length of the table.

Figure 5.1 - Establish Length



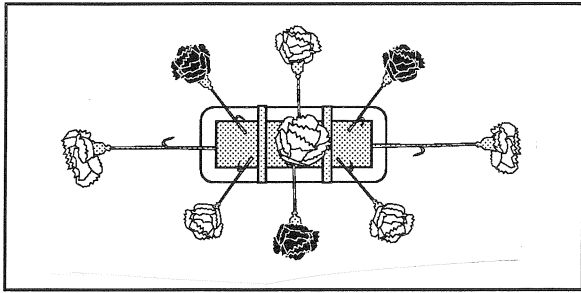
Next, insert two flowers on the other two sides to establish the width of the arrangement. The flowers should almost rest on the edge of the container.

Join the lower flowers to the center flower by inserting four more flowers diagonally in each of the opposite corners, making them shorter than the main flower and those at either end, but longer than the flowers that establish the width.

Figure 5.2 shows an overhead view of the centerpiece with the lines established.

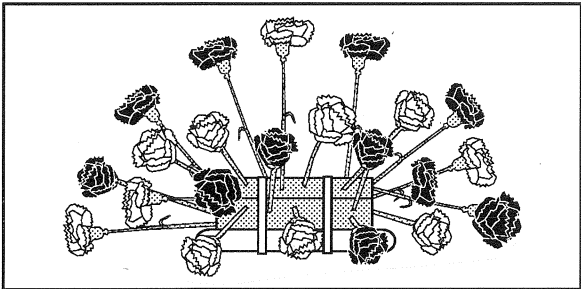
Floristry

Figure 5.2 - Overhead View of Lines



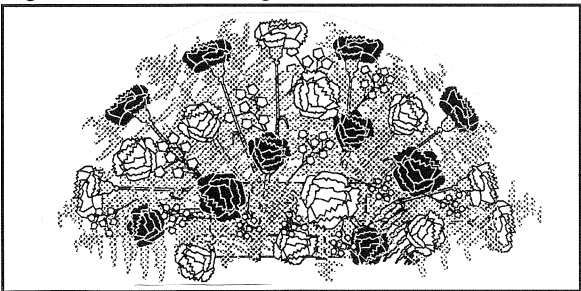
Fill in the lines - After establishing the lines, fill them in (Figure 5.3). Be careful not to crowd the flowers. Follow the basic rules of design. Centerpieces will be very similar on either side.

Figure 5.3 - Fill in the Lines



Add foliage and filler - Add the foliage and filler next (Figure 5.4). Some designers add the foliage before inserting the flowers. This is a matter of personal preference; however, be careful not to have too many foliage stems in the top of the foam because they can interfere with the placement of the flower stems.

Figure 5.4 - Add Foliage and Filler



Flower shops will often "green up" a number of containers before a very busy season to help save time in constructing large numbers of arrangements.

If placed in well soaked floral foam and kept cool, foliage will often outlast the flowers in an arrangement.

Refill the container with water - Lastly, refill the container with water mixed with a preservative. Flowers and foliage will often take up more water, and they should NEVER run out.

Summary

Designers should be able to construct centerpieces that are attractive from any angle, since they will be viewed from all sides. To create centerpieces efficiently, follow the steps above.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Redbook Florist Services Editorial Advisory Committee. *Basic Floral Design*. 2nd ed. Paragould, AR: Redbook Florist Services, 1993.

Reiley, Edward H.; Carroll L. Shry. *Introductory Horticulture*. 3rd ed. Albany: Delmar Publishers Inc., 1988.

Stratman, Teresa. *Retail Floriculture, Book 2*. Columbus: Ohio State University, 1976.

Lesson 6: Wreaths

Wreaths are used throughout the year with materials and accessories that reflect the season. For Christmas, the single largest holiday for the florist (mainly because Christmas is celebrated as a season beginning after Thanksgiving and continuing through Christmas Day), one of the major items that florists sell are wreaths made of evergreens.

Types of Base Materials for Wreaths

A fresh green wreath can be made in several ways. The easiest method is to purchase an undecorated evergreen wreath and decorate it. Some florists with limited time and few employees do this. However, constructing your own wreath is more economical, especially if you can cut your own evergreens. White pine, Scotch pine, white spruce, silver fir, boxwood, noble fir, and blue spruce are some of the more suitable evergreens for constructing your own wreath.

These evergreens may be attached to several different types of frames. Styrofoam™ or straw wreath frames are available for purchase. The greenery must be picked or attached to these frames with greening pins.

A wire frame is less expensive than a Styrofoam™ or straw frame, but it requires more time for construction. The greens are either wired in place or the wire frame is filled with moist sphagnum and wrapped with green plastic, with the greens then being inserted through the plastic.

Another method for using a wire frame is called a hillman. This type of base is made using a nine-gauge wire. Cross pieces of wire are attached to each other by using a special piece of equipment that will clamp them together or by using pliers. Gather the evergreens in bunches of four or five sprigs about six to eight inches long, then clamp a cross piece firmly around the bunch.

Grapevine wreaths are another type of wreath frame that can be used when constructing wreaths. Cut the sprigs of evergreens six to eight inches long. In bunches of three or four, insert

them in between the spaces of the grapevine. Wire or glue them into place to attach them firmly.

Tips for Making and Decorating Wreaths

When making a wreath, remember a few important tips.

1. It is best to start the greens at one point and from there work in one direction. If a crescent accent is used, begin the design in the center and work outward in each direction.
2. Set the wreath up or secure it to an easel when working on it to give the proper perspective.
3. When using silk flowers or other artificial materials, dip the stems into glue before sticking them into the wreath frame.

Some pointers should always be kept in mind when decorating wreaths.

1. The focal point is usually the bow. Gather the major decorations around it.
2. If a large decoration is used, such as a stuffed animal, place it at the bow and secure it firmly.
3. If other smaller decorations are used, it is better to keep them together than to scatter them.
4. To add further interest, try looping the ribbon around the wreath.

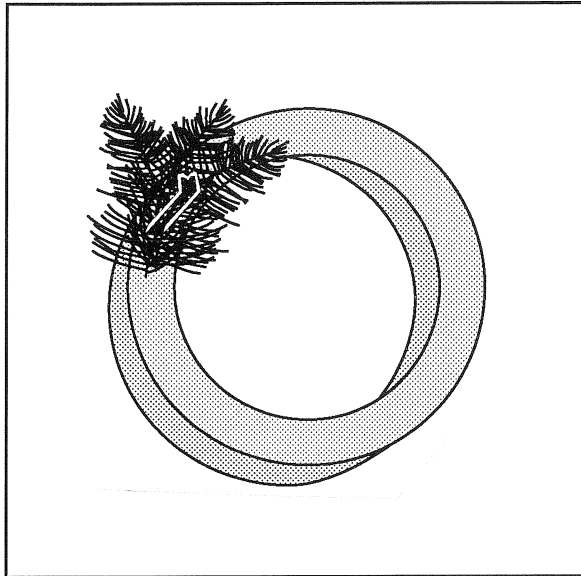
Creating a Wreath with a Styrofoam™ or Straw Base

The materials needed for the procedure include a Styrofoam™ or straw wreath frame, evergreens, greening pins or small pieces of wire bent into hairpin shapes, ribbon (usually #40), and various decorations for the wreath.

1. Cut the evergreens into six to eight inch lengths.
2. Gather several pieces together (usually three).

Floristry

Figure 6.1 - Inserting Greening Pin



3. Anchor the pieces firmly into the wreath frame with the greening pins (Figure 6.1).
4. Continue until the wreath frame is covered, being sure to overlap the greens. Pin each successive bunch of greens so that they cover the pin from the previous bunch. Moving in one direction, continue around the frame until the entire wreath frame is covered. No holes or gaps should be visible.
5. If some sprigs are too long and stick out, trim them after the wreath is completed.
6. Make a bow using #40 ribbon. The material used for the ribbon will depend on whether the wreath will be used indoors or outdoors. If the wreath will be placed outside, be sure to use weather-proof ribbon.
7. Tie off the ribbon with heavy wire (about #18).
8. Wire the ribbon into the wreath with the wire coming out the back so that it can be twisted into a hook for hanging (Figure 6.2). If the ribbon is to be off center, then use another piece of wire for the hook.
9. Wire or glue decorations onto the wreath. If the decorations are heavy, be sure to wire them onto the wreath. Pine cones are

Figure 6.2 - Adding the Bow



commonly used in Christmas wreaths and are an example of a decoration that should be wired on. Lighter decorations can be glued.

Summary

Wreaths are popular decorations purchased throughout the year, although they are especially in demand at Christmas. In order to meet this demand, the florist needs to know what materials can be used for making wreaths as well as how to construct and decorate them.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Redbook Florist Services Editorial Advisory Committee. *Basic Floral Design*. 2nd ed. Paragould, AR: Redbook Florist Services, 1993.

Unit VI - Types of Designs

Redbook Florist Services Editorial Advisory Committee. *Floral Design for the Holidays*. Paragould, AR: Redbook Florist Services, 1991.

Reiley, Edward H.; Carroll L. Shry. *Introductory Horticulture*. 3rd ed. Albany: Delmar Publishers Inc., 1988.

Lesson 7: Silk Arrangements

Many permanent or "silk" flowers are available on the floral market today. These silk flowers resemble natural flowers remarkably and are quite durable. The quality and variety of the permanent flowers that are available are constantly improving.

Differences between Silk and Fresh Flowers

Silk arrangements are constructed in much the same way as fresh arrangements except for a few basic differences. Silk flowers must be prepared for use by bending them into their natural shapes. When silk flowers are shipped, they are often tightly packed into boxes. The better silk flowers have individually wired petals and leaves so they can be shaped.

Silk flowers are available in a wide variety of colors. Some silk flowers do not have a counterpart in nature. While fresh flowers are limited in availability during certain seasons of the year, silk flowers are available year-round.

The stems of silk flowers have an added advantage in that they can be lengthened or shortened for the desired design (Figure 7.1). If the stems are too short, the designer can easily add more length to them by adding wire, a wooden pick, a hyacinth stake, or part of a stem from

another flower. Because the stems of silk flowers are made of wire, they can be bent into the desired shapes.

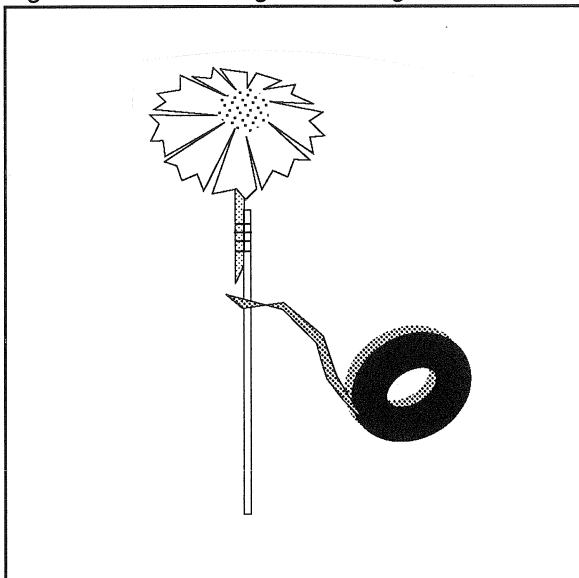
Arranging Tips

Silk arrangements are designed to last for a very long time, so the designer must use extremely good construction. Each flower stem should be glued into place in the arrangement, which is usually accomplished by dipping the stems into pan melt glue.

When arranging with fresh flowers, the floral foam is "greened up," or covered with foliage. This step is too expensive for silk arrangements, though. Instead, the foam is covered with sheet moss or Spanish moss. If sheet moss is used, it is easier to wet the moss and allow it to conform to the side of the dry floral foam. Do NOT glue sheet moss to the foam since this will make it difficult or even impossible to stick the stems through the glue. As the stems are inserted, the moss will help hold them in place.

Multiple-stem silk flowers usually include flowers at all stages of development. Cut these apart to make the best use of them. Silk bushes can be economical because they have a lot of foliage as well as flowers. Silk bushes should also be cut apart. Save any unused greenery or stems for future arrangements. Use wire cutters to cut the stems. Do not try to use regular scissors.

Figure 7.1 - Extending Stem Length



If a stem is not stiff enough to pierce the foam, use a pick machine to put a pointed steel pick on its end.

Constructing a Silk Arrangement

1. First choose the basic shape of the arrangement. The shape is somewhat dictated by where the finished arrangement will be placed. The size of the arrangement also depends on its placement.
2. Choose the colors and flowers to use in the arrangement. Again, the colors of the surrounding area will help determine the color of the arrangement. The season is also a determining factor in both the color and the type of flowers used.

Floristry

3. Select a container that will complement the flowers and their surroundings. The container must also be in proportion to the size of the flowers.
4. Assemble the tools and materials to be used.
 - a. Dry foam and Styrofoam™ are the two major holding devices used in silk arrangements. Styrofoam™ is stronger, but it is difficult to stick weak stems into it.
 - b. The type of container influences the type of anchoring needed for the foam. Some containers are made so that foam can be wedged into the container without further anchoring. However, it may be necessary to glue the foam or an anchoring pin or two into some containers. Some containers require a few strips of oasis tape to secure the foam.
 - c. Some silk flowers have sufficient amounts of foliage on the stems. However, you often need to purchase extra silk foliage or use some you have saved to complete an arrangement.
 - d. Sheet moss or Spanish moss does not need to be glued to the foam. Instead, use a fern pin or a greening pin to help hold the moss while arranging the flowers. Once several stems have been inserted, no further pinning is usually required.
 - e. Wire cutters are necessary because most silk flowers have wire stems.
 - f. Melted pan melt glue is also needed.
5. Anchor the holding device in the container.
6. Cover the holding device with moss.
7. Dip the ends of the flowers in pan melt glue before inserting them into the foam.
8. Arrange the flowers in the desired shape.

Summary

Silk or permanent flowers are an excellent addition to a flower shop. They fill specific needs for customers. Designers should know the differences in arranging fresh and silk flowers and be able to construct silk arrangements that will fill their customers' needs.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Redbook Florist Services Editorial Advisory Committee. *Basic Floral Design*. 2nd ed. Paragould, AR: Redbook Florist Services, 1993.

Woodhull, James; Valerie Brosey; Petel Kreysa. *A Catalog of Performance Objectives and Performance Guides for the Floriculture Worker, Retail Flower Shop Salesperson, and Floral Designer*. College Park: University of Maryland Department of ITOE, 1984.

Lesson 8: Dried Arrangements

A customer's needs may sometimes be better met with a dried arrangement rather than fresh or silk flowers. While the preserved plant material usually does not have the traits of the fresh material, it may be used for flower arranging and presentation in ways that the fresh flowers could not.

Techniques for Preserving Fresh Flowers and Foliage

Several different techniques can be used to preserve fresh flowers. They include drying, glycerinizing, skeletonizing, and pressing.

Drying - Flowers can be dried by two methods, air drying and silica gel.

To air dry flowers, gather them in small bunches, then bind them together with a rubber band. Because the stems shrink when they dry, a rubber band will continue to hold them together. The flowers should be hung in a dry, dark place until completely dried, usually for two to three weeks.

Silica gel is a white, sandy material with little indicator crystals. The crystals are blue when dry, but turn pink when they have absorbed moisture. To use this drying method, carefully place the flowers in the silica gel and gently sift it in and around the petals. This step is important because the petals will be in this same position when they dry. Silica gel dries flowers in only two to three days. To make this drying method even faster, flowers can be placed in the microwave, provided that they are not wired. Flowers can also be dried by burying them in clean, fine sand, borax, or a mixture of cornmeal and borax. However, silica gel has the advantages of speed and more natural looking flowers.

Glycerinizing - Glycerin is a colorless liquid that is made from fats and oils. Glycerinizing is a method of preservation that mixes one part glycerin to two parts water to preserve foliage. Stems are placed in this solution until they have absorbed enough of the glycerin that the leaves are pliable. Dyes can be added to color the foliage.

Skeletonizing - Skeletonizing is a process in which the leaves are boiled with boric acid until all the "flesh" of the leaves is gone, leaving only the veins of the leaves.

Pressing - Pressing flowers is probably one of the oldest methods of preserving flowers. It usually works best to place the flowers between two layers of old newspaper, followed by blotter paper on each side of that, then a layer of cardboard on each side, with a heavy weight placed on them. In lieu of these layers of paper and cardboard, old phone books work extremely well. Be careful not to dry too many flowers at one time since moisture can build up and cause mold.

Constructing a press is simple, often easier than piling stacks of books on top of papers. To construct a press, begin with two like-sized pieces of plywood. It works best if the plywood is the same size as the papers to be used for pressing. Drill a hole in each corner of the plywood. Insert long screws through the holes, then screw a wing nut onto the ends so the two pieces of plywood are pressing the paper and flowers in between them.

Considerations for Designing with Dried Flowers

Dried arrangements are constructed just as silk and fresh designs are. The designer does need to keep a few special considerations in mind, though, when constructing dried arrangements.

1. Dried flowers are often on their own dried stems. These stems are more brittle and less permanent than those of silk flowers.
2. Some stems may be very weak as well as brittle. To arrange these flowers, it may be necessary to use a pick machine and attach metal picks to the stems. Several flowers are usually grouped together when picks are used.
3. A softer dry foam is available for easier insertion of dried stems.
4. As with silk arrangements, cover the foam with sheet moss or Spanish moss.

Floristry

5. Stem lengths can be increased by adding wire or taping picks.
6. Since dried flowers are often on their own dried stems, the stems are not able to bend.
7. Most dried flowers are lightweight, so it may be necessary to use a heavy container or to add weight to a lightweight container such as a basket to keep the container upright.

Constructing a Dried Arrangement

To construct a dried arrangement, several steps are required.

1. Choose the desired shape for the arrangement. Where the arrangement will be located influences the shape and colors chosen for the arrangement.
2. Choose the colors and types of dried flowers and the other material to be used.
3. Select a container that complements the arranging material.
4. Assemble the tools and materials that will be used.
 - a. Gather dry foam or Styrofoam™. Because Styrofoam™ is much stronger, it can be used when designing with thick or heavier stems. However, it is difficult to pierce with the more fragile stems. Either the softer dry foam must be used or all of the weaker stemmed material must be picked.
 - b. Choose the anchoring device, using the same principles described for choosing such materials for silk arrangements.
 - c. Gather the dried flowers and material, sheet moss or Spanish moss, fern or

greening pins, wooden or metal picks, and the melted pan melt glue.

5. Anchor the holding device in the container.
6. Cover the foam with sheet moss or Spanish moss. If necessary, use fern pins or greening pins to keep the moss in place.
7. Plan the arrangement by placing flowers in the desired shape before gluing them.
8. Dip the stem of each flower into the glue and insert it into the foam, arranging the flowers.

Summary

Arranging with flowers that have been preserved is generally quite similar to arranging with fresh or silk flowers, with a few exceptions. The most notable exception is that the stems of dried flowers are brittle and cannot bend.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Drying Flowers and Foliage for Arrangements (GO6540). University Extension Agricultural Publications.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Woodhull, James; Valerie Brosey; Petel Kreysa. *A Catalog of Performance Objectives and Performance Guides for the Floriculture Worker, Retail Flower Shop Salesperson, and Floral Designer*. College Park: University of Maryland Department of ITOE, 1984.

Lesson 9: Dish Gardens

Customers often want live green plants as opposed to fresh cut flowers or flowering potted plants. One of the more popular methods of marketing live green plants is to plant several of them together in one container. This type of design is called a dish garden.

Factors to Consider in Selecting Plants

Several factors should be considered when selecting plants for a dish garden. It is of utmost importance that all plants are compatible in their cultural requirements. They need to have the same requirements in light intensity, watering needs, and temperature. For example, cacti and other succulents, which do not require much water, should not be mixed with other green plants. Other considerations include height and rate of growth. Plants should also be chosen for their forms, colors, and textures so they will be a good contrast when planted together.

All too often, plants that are too diverse are crammed together in a container that is too small. While this may have an immediately attractive effect, over time the plants will deteriorate and the customer will be unhappy.

Components of a Dish Garden

A dish garden has a number of important components.

An appropriate dish garden container should not detract from the plants, but rather complement them. Dish gardens are planted in low, shallow containers that are usually four to six inches deep. Dish garden containers usually have no drainage holes.

Gravel or pebbles are placed in the bottom of the dish garden for drainage. A fine gravel works best, preferably aquarium gravel.

Regardless of what kind of potting "soil" is used in the dish garden, the medium should be sterile, free from disease and weed seeds. A light, well-drained soil or a growing medium such as $\frac{1}{3}$ peat moss, $\frac{1}{3}$ vermiculite, and $\frac{1}{3}$ perlite works well.

Ideally, the plants used in a dish garden are small and able to be grouped together. Plants with vast numbers of roots are not well suited for dish gardens.

Sheet moss is used to cover the soil to finish off the dish garden and add the look of grass.

Plant Shine® or some form of material that will help gloss the leaves improves the look of a dish garden.

Accessories or decorations can also be added to the dish garden. They can include holiday picks, bows, fresh flowers, or even ceramic animals.

Constructing a Dish Garden

When constructing a dish garden, certain steps need to be followed.

1. Select the appropriate container.
2. Make sure the container is clean. A clean container is important not only for the sake of attractiveness, but because plant diseases may be present in a dirty container.
3. Cover the bottom of the container with half an inch of gravel or pebbles to allow for drainage and to help keep the plants from being over watered.
4. Fill the container halfway with a sterilized medium.
5. Gently remove the plants from their pots. If possible, try not to remove too many roots.
6. Following the principles of design, place taller plants toward the back of the dish and shorter ones in front. Place them on the medium, being careful not to place them too close together. Carefully fill the container with a sterile potting medium. Make sure there is potting medium in and around the roots of the plants. Sometimes a pencil can be used to gently fill in the soil around the roots.

Floristry

7. If necessary to cover all the plant roots, fill the container almost to the top with more of the medium.
8. Press the potting medium firmly around the plants.
9. Water the plants, being careful not to over water them.
10. Cover the medium with sheet moss.
11. Clean the plant leaves with a commercial cleaner (such as Plant Shine®) or a soft damp cloth.
12. Fresh flowers, such as chrysanthemums or miniature carnations, can be placed in water picks and added to the dish garden. Silk flowers can be stuck directly in the soil. A seasonal accessory, like a holiday pick or bow, can also be added.

Figure 9.1 shows a completed dish garden.

Figure 9.1 - Dish Garden



Summary

Flower shop employees should master the steps for constructing a dish garden. Selecting the proper plants for the garden is especially important in creating an attractive design and ensuring the health and longevity of the plants used.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Redbook Florist Services Editorial Advisory Committee. *Floral Design for the Holidays*. Paragould, AR: Redbook Florist Services, 1991.

Stratman, Teresa. *Retail Floriculture, Book 2*. Columbus: Ohio State University, 1976.

Woodhull, James; Valerie Brosey; Petel Kreysa. *A Catalog of Performance Objectives and Performance Guides for the Floriculture Worker, Retail Flower Shop Salesperson, and Floral Designer*. College Park: University of Maryland Department of ITOE, 1984.

Lesson 1: Sales Transactions

Being a successful salesperson requires skill and knowledge of sales and procedures. If a florist's employees are not able to handle customers successfully, they will not be successful on the job. In *Secrets of a Winning Personality*, the author writes that if a person is friendly, other people feel wanted and appreciated. To have a winning personality—and be a good salesperson—you must first truly LIKE people. A good salesperson LISTENS to customers and is sincerely interested in them and what they want.

The first impression presented by the flower shop and its employees will make a lasting impression on the customer. Employees must always remember that without the customers, the flower shop will not stay in business.

Sales Transactions

Customer service begins when the customer enters or phones the florist shop, and it does not end until the customer is completely satisfied. Salespeople must be friendly and enthusiastic about their jobs and the products they sell. Good communication skills are essential. Salespeople need to be knowledgeable about the services the shop provides, the products offered for sale, suggestions for designs and plants, and price ranges.

The first thing a successful florist shop employee must do is to *greet customers* as soon as they enter the shop. No one likes to be ignored, and a quick greeting establishes that the shop is a friendly place to be.

If customers want assistance, *ask questions* about their needs and try to fill them. The salesperson must determine how to help customers focus their attention. Questions will help *determine their needs*. Sometimes customers are not quite sure what they want, and questions may help them. *Give them suggestions* and assist them in making decisions. If customers have objections, asking questions and making suggestions can assist in *overcoming their objections*. Give customers several choices if possible. However, do not give

customers too many choices because they may cause added confusion.

After helping customers make their choices, *close the sale*. Many sales are lost because the salesperson does not offer to "write up the order" or nudge the customer into making a decision. When the order is complete, thank the customer for their order.

Florist Wire Services

"Flowers by wire" is an expression that no longer means what it once did. The first wire service, Florist Transworld Delivery (FTD), used "wires," or telegraphs, to send orders to member florists. Today, all orders are sent via telephone, computer, or fax machine.

Florist wire services are clearinghouses through which a florist in one city sells an order for delivery in another city, state, or even country. The person ordering the flowers pays for the flowers ordered plus a delivery charge, service charge, and sales tax. The sending florist then sends the order via telephone, computer, or fax to a florist at the desired location. The receiving florist then fills the order and delivers it. The order is then sent to the wire service clearinghouse, which processes all the business transactions between member florists. See Figure 1.1.

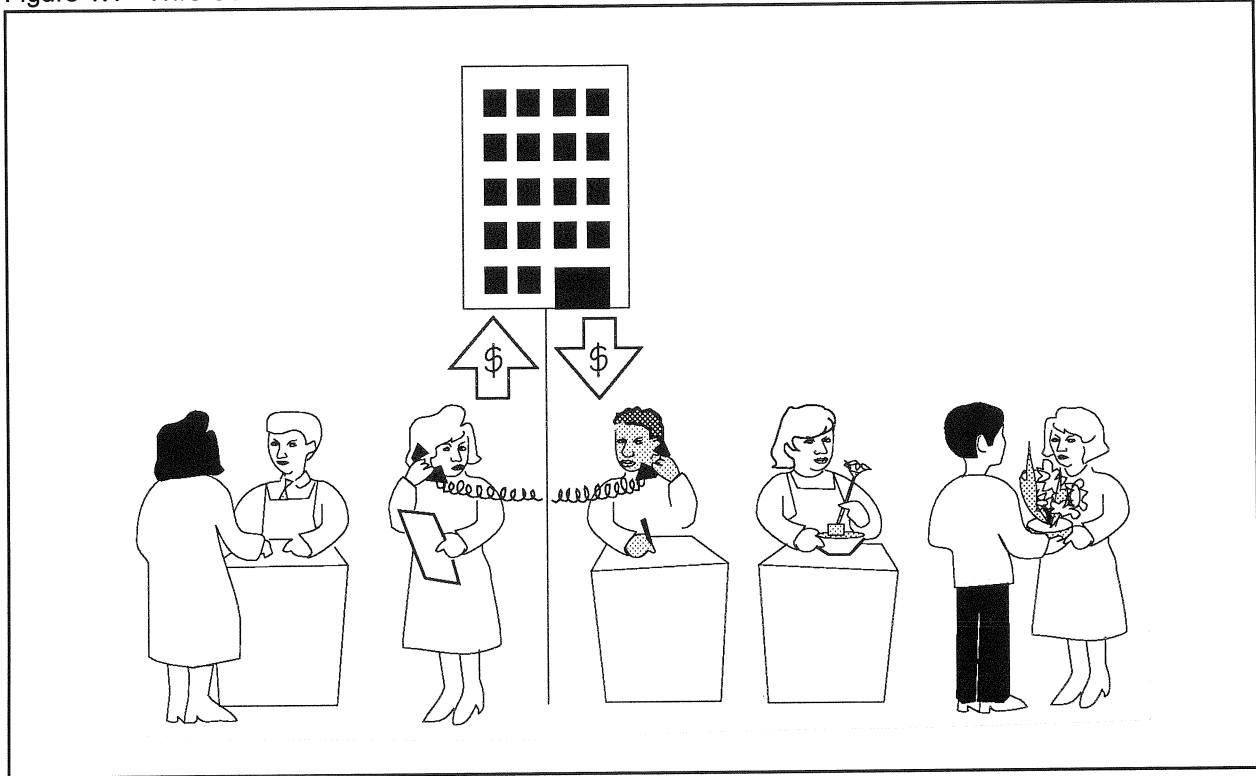
Each member florist receives a monthly statement from the wire service clearinghouse with a bill or a payment for the orders processed by that florist. The sending florist receives between 10 and 20 percent of the value of the order. The wire service keeps five percent. The receiving florist must fill the order at full value, but will only receive 75 percent of the value of the arrangement.

Florist wire services are extremely valuable organizations for flower shops to join. Some of the more popular wire services include the following businesses.

- Florist Transworld Delivery (FTD)
- American Floral Services (AFS)
- Redbook
- Telefloral
- Florifax International
- Carik Services, Inc.

Floristry

Figure 1.1 - Wire Service Transaction



FTD maintains a computer network for member florists called the Mercury network. Orders are placed on the computer, and both sending and receiving florists receive a printed copy of the order.

Most wire services print membership directories that look like large phone books and list all subscribing florists by city. If more than one florist in a city belongs to the same wire service, their names may be rotated each year the directory is printed. Each member florist is also identified by a code number.

A selection guide is also provided to each member florist. The guide provides pictures of arrangements for various occasions and seasons that will be available at the various shops. Customers may look at these guides and order arrangements from them.

Florists often join several wire services, but they must pay a fee for each one to which they subscribe. Most wire services have strict regulations and guidelines that member florists

must meet and adhere to or they will lose their membership. Upon application for wire service membership, the shop will be inspected to make sure all orders sent to this shop will be of exceptional quality.

Wire services also offer wholesale merchandise that is part of the arrangements they promote. In addition, they provide educational material and classes for members and publish magazines. Some of the more popular wire service magazines include the following.

- *Florist* (FTD)
- *Flowers&* (Teleflora)
- *Design for Profit* (Florifax)
- *Professional Floral Designer* (AFS)

A more recent addition to the floral market is a service called 1-800-FLOWERS. Customers are encouraged to call the agency directly, but the service acts as an agent and transfers the order to flower shops to be filled and delivered.

Taking a Wire Service Order

If an order is received through a wire service, be sure to include the sending shop's wire service number in the order. When sending a wire service order, include the name, address, telephone number, and wire service number of the receiving shop.

Customer Complaints

Customers commonly complain about some specific areas of the florist's services.

- The flowers were of poor quality or did not last well.
- The delivery was late or was not received when expected.
- The florist had to substitute flowers different from those ordered.
- When orders are taken over the telephone, customers sometimes have difficulty visualizing what a florist describes. They can be disappointed if the order turns out to be different from what they expected.

Handling customer complaints is sometimes a difficult task, but one that an employee must be able to do tactfully. If a complaint is not handled satisfactorily, then that customer will not return to the shop. Customers often tell their friends about poor service they have received from a shop.

Most shops have a definite policy for employees to follow when handling customer complaints. While they vary, most policies follow these general guidelines.

- Some florists unconditionally guarantee their flowers. Others will make price adjustments only within 24 hours of delivery.
- Every shop needs a return policy outlining the amount of time a product can be returned for a refund, credit, or exchange.
- Some florists request customer opinions. Their opinions can be learned by enclosing a card stating "Let us know if this arrangement does not meet your expectations" with the order.

Employees should follow some simple guidelines for dealing with customers who are upset. They should listen to the customer's entire story without interrupting and then repeat the major points, showing that they have been listening. The employee receiving the complaint should remain calm, using relaxed body language and a calm tone of voice. Employees should not make excuses or minimize the problem; instead, they should try to assure the customer that they will find the cause of the problem and keep it from happening again.

Although customers may not always be right, the employees of the florist shop need to agree with them rather than arguing. Arguing with customers does not pay, since it will only aggravate them further. Instead of arguing, employees should thank them for telling them about the complaint and bringing the problem to their attention.

The goal when dealing with customer complaints is to always resolve the problem as positively as possible. One way to accomplish this goal is to ask the customer how he or she would like to solve the problem.

If employees find that they are unable to handle a customer complaint, they should always ask the manager to step in and handle it. Customers sometimes ask for the manager if the situation is not being handled to their satisfaction; therefore, it is better to request the manager's assistance before the customer does. Having the manager handle the complaint shows the customer that his or her concerns are important.

After a complaint is made, employees should try to determine what caused the customer to complain in order to avoid such situations in the future, if possible. In the case of a customer who is unhappy with a delivery, for example, have the delivery person return the defective flowers to the shop. Very often, only one or two flowers will be wilted in an arrangement. Improper handling by the customer is sometimes the reason for defective flowers. Customers need to be educated about the fragility of flowers. Replacing or refunding the purchase may still be necessary even though the florist is not at fault.

Floristry

Sometimes it will be impossible for the florist to inspect the flowers of an order, as in the case of funeral flowers or a corsage. If a customer is unhappy with such an order, making an adjustment in price or giving extra value on another order will be necessary.

Telephone Etiquette

Because 75 to 80 percent of a florist's business is conducted over the telephone, good telephone skills are imperative. It is extremely important for all employees to use proper telephone etiquette. The image telephone customers have of the florist shop is formed by what they hear when speaking to the salesperson.

Make sure to keep an order form, pen, and pencil by the telephone. Many florists keep a pen on a chain by the telephone so that it is always handy for taking an order. Customers despise waiting while a clerk hunts for a pen to take their orders!

Always answer the telephone promptly. When flower shop employees answer the phone, they should state their name and the name of the shop: "Dot's Flowers, this is Jane. How may I help you?" Florists will sometimes use a greeting related to a holiday. For example, "Merry Christmas!" or "Season's Greetings!" may be added to the customary telephone greeting.

Determine the name of the customer. If necessary, write the name down to avoid forgetting it. Address the person by his or her name during the conversation or sales transaction. Speak in a friendly voice, but do not be overly familiar with the customer because it offends some people.

Take the order as efficiently as possible. Do not tie up the telephone line any longer than necessary, and never keep the customer waiting.

Filling out a sales slip is **EXTREMELY** important because it contains all of the information for the floral order, the cost, and the location for delivery if requested. Be sure to fill out the sales slip completely.

When taking a telephone order, the flower shop employee must be very careful to make sure that

the order is complete, the instructions are clear, and the order is legibly written. Designers do not have the time to decipher someone's messy handwriting, especially during rush seasons.

After an order is completed, it goes to a designer to be filled and then to a delivery person for delivery.

Here are some tips for using the telephone.

- Answer promptly, by the second ring if possible.
- Speak clearly and distinctly (do not slur words) with a smile in your voice. A smile and friendly voice will project onto the conversation. Never sound annoyed at having to answer the phone.
- Use the customer's name if it is given.
- Do not keep the customer waiting on the line.
- Do not eat, chew gum, or drink while talking on the telephone.
- Avoid coughing into the telephone.
- Never drop the receiver while the customer is on the line.
- Always let the customer hang up first since he or she may think of something else to order.
- Repeat the order back to the customer to eliminate mistakes. Re-emphasize what the customer ordered.
- On funeral orders, it is in poor taste to say, "Thank you." Instead, close with, "We will make sure to take good care of this for you."

"May I Take Your Order?"

When taking a floral order, whether over the telephone or in the shop, it is extremely important for the salesperson to record the proper information. The information needed on a sales slip (Figure 1.2) includes all of the information regarding the sale and delivery of the order.

- The date the order is taken
- Customer's name, address, and telephone number
- Information for pick up or delivery
- For deliveries, the recipient's name, address, and telephone number

Figure 1.2 - Sales Slip

Flower Shop										Invoice No.	
Sold to:											
Address											
City, State						Zip Code					
Phone No.											
Sold by		Date			Phoned In Out		Wire In Out		Other In Out		
Sending Wire No.		Shop Wire No.		Customer No.				Delivery A. M./ P. M.			
Cash	C.O.D.	Charge		Card No.				Exp. Date			
Qty.	Description										Amount
	Delivery Charge										
	Relay Charge										
	Phone										
	Subtotal										
	State Tax										
<i>Thank You!</i>								Total			
Deliver to: _____											
Address _____											
City, State _____						Zip Code _____					
Baby Boy/Girl	Birthday	Holiday	Congrat.	Anniver.	Recovery	Sympathy	Other				
Card											

Floristry

- Delivery date (if possible, include whether morning or afternoon delivery is preferred)
- Clear instructions
- Special instructions
- Purpose (ie. birthday, wedding, funeral, etc.)
- Message for the enclosure card
- List and number of items ordered
- Description of how the order should be processed
- Price of each single item, with the extended price multiplied from it
- Subtotal
- Telephone charge (if it is a wire service order)
- Delivery charge
- Sales tax
- Total
- Form of payment
- Name of salesperson
- Name of designer filling the order

The information about the customer and the recipient is valuable in case questions about the order arise. Occasionally, certain items are unavailable when the shop attempts to fill an order. If possible, check with the customer before making any substitutions in an order.

If an order is taken in the shop, customers will often write out and sign the enclosure card themselves.

The number of items ordered and how they should be processed are vital pieces of information on a sales slip. They should be written similar to this example: "One dozen roses--arranged." If more than one of the same item is purchased, the cost of a single item is recorded, then the extended price is figured, as in the following example.

2 orders of one dozen roses--arranged
1 order = $\$45 \times 2 = \90

It is also important to mark on the sales slip if the order is to be picked up by the customer. The

flower shop certainly does not want the order to be delivered by mistake!

It is imperative to clearly mark the form of payment. If the order is charged, be sure to include all of the information needed to process a charge card transaction or an addition to a charge account at the shop. Employees also need to be very familiar with the shop's policy on accepting personal checks.

The order should be recorded in duplicate and sometimes triplicate. One copy should always be given to the customer.

The employee taking the order should be sure to initial or write his or her name on the order. Identifying who took a particular order can help if there are any questions about the order later. The designer can direct question to that person rather than bothering the customer.

Summary

Taking orders either in person or over the telephone is an important skill for any flower shop employee. Many things need to be remembered when filling out a sales slip.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Liesveld, John H. *The Retail Florist*. 3rd ed. New York: Macmillan, 1957.

Stratman, Teresa. *Retail Floriculture, Book 1*. Columbus: Ohio State University, 1976.

Lesson 2: Floral Delivery

Delivering arrangements and flowering potted plants is a service that is often offered to floral customers. It is especially appreciated when the order is for someone in the hospital or for a funeral. Wire service orders, of course, must be delivered.

By offering delivery of flowers, the florist is offering a service that will not only be an aid to the customer, but is also an excellent advertising tool. Therefore, it is of utmost importance that the delivery person be neat, efficient, and courteous while completing the delivery in an efficient and timely manner.

Importance of a Good Delivery Person

The delivery person is an extremely important representative of the flower shop. This position generally offers the lowest pay, yet his or her service is just as important as that of any other employee. Delivering flowers is hard work, especially during inclement weather and in heavy traffic. Often the delivery person is the only one with whom the customer has contact. The delivery person is the public relations connection between the recipient of the delivery and the flower shop. If a delivery is not handled well, the good sales work and the designs of the other employees will be in vain. Good delivery service can make the difference in whether or not a flower shop stays in business.

Some flower shops do not offer delivery services. These shops can charge less for their arrangements since they do not incur the expenses of a delivery vehicle and driver. Others have extra charges for delivery, and most require a minimum dollar amount for an order before they will deliver it.

Delivery Person Skills

A good delivery person will possess the following skills.

Driving and vehicle maintenance skills - A good delivery person is a safe driver. Accidents are expensive and can increase the flower shop's

liability and automobile insurance. They can also put the delivery vehicle out of commission for some time.

This person should always have a courteous attitude, not only in person, but also when driving. Most delivery vehicles advertise the name of the flower shop on the sides of the van. If the driver is discourteous, it reflects badly on the shop.

The driver must keep the delivery van clean and in good running condition. Time and money are lost if the delivery vehicle breaks down.

The delivery person should know the delivery area. Drivers can waste precious minutes if they do not know the delivery area well and they wander around trying to find the delivery location.

In some states, a delivery person may need a commercial driver's license.

Communication skills - The delivery person must also be able to communicate with people. Customers will often ask questions, and the driver must be able to communicate effectively with them. Drivers should use proper English and good grammar when speaking with customers. Reading, writing, and spelling skills are especially important when leaving notes for customers about where they may find their arrangements. A knowledge of other languages, such as Spanish, may be helpful in some areas.

The delivery person must also know how to dress properly and be neat and well groomed. Some shops provide their drivers with uniforms. Uniforms should be clean and well pressed. A neat and professional appearance creates a favorable impression of the shop.

Floral skills - The driver may need some arranging skills as well. Arrangements may sometimes be damaged during transport. If the driver does not have time to return the arrangement to the shop, he or she must make the repairs.

Drivers should be able to identify the flowers they are delivering and answer customer questions. Customers often ask questions about the arrangements they receive, and they may even ask how to care for them.

Floristry

Drivers need to know which flowers cannot tolerate extreme temperatures so they can take measures to protect them. These actions can help ensure that flowers arrive in the best condition.

Routing an Order

Learning to route an order is very important for a delivery person to be truly effective. The steps in routing an order are as follows.

1. Sort orders according to the date of delivery.
2. Sort orders according to the time they are to be delivered.
3. Sort orders according to where they are to be delivered
4. Place the deliveries in chronological order.
5. Route the deliveries on a route sheet with minimum mileage.

Special orders are orders that **MUST** be delivered at a specified time. The delivery person should make sure that they are marked clearly.

Steps in Making a Delivery

1. Sort orders according to time and area of delivery.
2. Plot a route.
3. After establishing a route, make a list of stops in order of first delivery, second delivery, etc. Put the list on a clipboard and place it by the driver's seat.
4. Some flower shops call private residents to check if someone will be home to accept the delivery. For hospital arrangements, call to make sure recipients are still patients and are able to accept flowers.
5. If the weather is extremely warm or cold, start the delivery vehicle 10 to 15 minutes before loading it.
6. Pack the vehicle, making sure that items to be delivered last are loaded first. Keep taller

arrangements to the sides. Place balloons in garbage bags for their protection during delivery and to keep them from floating freely in the vehicle.

7. Make sure the arrangements are not going to fall over during transport. They should be packed in cardboard delivery bases or put in boxes with wadded up newspaper, sandbags, or tissue paper wedged around them.
8. Make sure the address for each arrangement is easy to see and read.
9. When arriving at the delivery site, always go to the front door unless instructed otherwise.
10. Carry a one-sided arrangement with the front of the arrangement facing the customer.
11. Knock on the door or ring the doorbell. When the door is answered, greet the recipients cordially, give your name, and inform them they have a delivery from the flower shop. Briefly give a tip that they should add water to the arrangement every day. Answer any questions they might have about the arrangement or plant. Ask for a signature.
12. If no one is home to receive the arrangement, follow shop policy. Delivering the arrangement to a neighbor and leaving a note or delivery tag (Figure 2.1) on the recipient's door informing him or her where the arrangement is located is often acceptable. Later, call to make sure that the arrangement was received.

Another alternative is to leave a note on the door with notice of the attempt to deliver, asking the recipients to call the shop or come in and pick up the arrangement. Return the arrangement to the shop.

Types of Delivery Services

Florists have several options about delivery. Most opt to deliver their own orders, but this practice has both pluses and minuses. With this option, the florist has the expense of paying a driver as well as purchasing a vehicle and all the expenses that

Figure 2.1 - Delivery Tag

NOTICE

For _____

Date _____

Time _____

You were out when we called. Please:

Phone Us

Pick up your delivery from:

FLOWER SHOP
Any Street
Any Town, Any State
Phone #

go with operating it. However, the florist does maintain control over the delivery.

In very large cities, florists sometimes form cooperatives. They meet at a central location once a day and pool their arrangements. Then, each shop delivers all the arrangements going to a certain area, which is more cost effective than driving long distances.

Commercial delivery services often work well for smaller florists with low volumes of deliveries. The florist usually pays the service by the arrangement, but additional fees are paid for deliveries that lie outside the delivery area.

Some florists hire a runner or jumper during the holidays. This person assists the driver by reading the map, checking off the delivery sheets, and carrying the arrangements to the recipients. If the weather is very cold, the runner can see if the recipient is at home without standing outside in the

cold with the delivery, freezing the plants or arrangements to be delivered.

Some florists keep a record of signed receipts for every delivery. The delivery person has the recipient of the arrangement sign a receipt stating that it was received. The florist keeps this receipt in a file for a period of about three months. Keeping receipts is especially useful for wire service deliveries. If there is ever a question about whether a delivery was made, the florist only has to turn to the file and see who signed for it.

Redbook's *Retail Flower Shop Operation* suggests a delivery kit in which they list the following items.

1. Local phone book
2. Street guides
3. City map - mounted and laminated on a board
4. Non-delivery tags
5. Pens, pencils, and note pads
6. Magnifying glass
7. Jumper cables and basic vehicle repair tools
8. Basic florist repair tools
9. Inclement weather gear
10. Blanket
11. Insurance and vehicle identification cards
12. Clock
13. Change for tolls and telephone
14. Cloth for cleaning spills
15. Jug of water

Summary

Having a good delivery person is important in order for a flower shop to maintain good customer relations. The delivery person must have certain basic abilities, such as driving and vehicle maintenance ability, communication skills, and floral skills, and must be able to plot a route and make a delivery correctly and efficiently.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Floristry

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Liesveld, John H. *The Retail Florist*. 3rd ed. New York: Macmillan, 1957.

Mercer, Robert J.; William J. Brown, Jr.; Gene M. Love; and Richard F. Stinson. *Retail Flower Shop Operation and Management*. Vol. 9, #1s. University Park: Pennsylvania State University, 1968.

Redbook Florist Services Editorial Advisory Committee. *Floral Design for the Holidays*. Paragould, AR: Redbook Florist Services, 1991.

Stratman, Teresa. *Retail Floriculture, Book 1*. Columbus: Ohio State University, 1976.

Lesson 3: Calculating Prices

In order to make a profit, florists must know how to price their merchandise. Employees should also know how prices are determined. With many flower shops and other outlets selling flowers, figuring a reasonable price may not be easy.

Determining Prices for Floral Arrangements

Many factors influence florists when they determine the prices of items in their shops. If florists ignore any of these considerations, then their shops will not be profitable and will soon go out of business.

When pricing an item for sale, the wholesale cost of materials is the first factor to consider. The net cost and the cost of freight or any delivery charge should be considered as well.

Overhead costs are the next major consideration. The labor of the designer is included in overhead costs. Accurate records should be kept for the amount of time it takes to handle or create each item. Overhead costs also include services rendered, the cost of the business, and the cost of out-of-date merchandise, which is merchandise that is no longer useable and must be thrown away or greatly reduced in price. Wholesale costs can also fluctuate greatly from season to season, especially for fresh cut materials, with Valentine's Day usually being the most expensive time. Inventory insurance is another overhead cost, as well as the cost of shrinkage or damage to merchandise in stock. Advertising costs, employee wages, and taxes are also overhead costs.

One consideration that many florists overlook is the profit margin. The profit margin is what a business makes after all expenses are paid. Some other considerations that affect the price of merchandise are competition from other florists and market demand. Each shop's expenses will be different, depending on its location and the market it is targeting.

Determining Prices for Potted Plants

Pricing potted plants and green foliage plants involves many of the same considerations as pricing floral arrangements, except that labor costs will be lower. Remember that potted plants and green foliage plants are alive and can be subject to deterioration if they are not sold quickly. If live plants deteriorate, they must be discarded. This waste must also be considered when pricing items.

Methods of Calculating Prices

Florists primarily use two methods of figuring prices: ratios and percentages. Most florists use the ratio method because it is easier, but the percentage method takes the profit margin into account.

Ratio Method - To figure prices using the ratio method (selling price : wholesale price), merchandise is categorized into four major types.

5:1 ratio - These items require a lot of time, labor, and creative design talent. Examples include wedding and party flowers.

4:1 ratio - The designs require some labor and design ability. An example is a regular corsage.

3:1 ratio - These designs require very little labor. Examples include small arrangements, bud vases, and decorated plants.

2:1 ratio - The designs require little or no design labor. Examples include pre-made cut flower bouquets, gift items, and undecorated plants.

To calculate the selling price of a floral product using the ratio method, multiply the wholesale cost of the item by the proper ratio amount. For example, the wholesale cost of one floral product is \$4.50. It ranks as a 3:1 ratio item. To calculate its selling price, multiply the wholesale price of \$4.50 by the ratio amount of 3.

$$\begin{array}{rccccccc} \$4.50 & \times & 3 & = & \$13.50 \\ \text{(wholesale cost)} & & \text{(ratio amount)} & & \text{(selling price)} \end{array}$$

The selling price of this floral product is \$13.50.

Floristry

Percentage Method - Using the percentage method, the florist determines how much a floral product will be marked up from its wholesale price. The markup is by a percentage.

To calculate the selling price of a floral product using the percentage method, first convert the markup percentage to its decimal equivalent. The conversion of a percent value to its decimal equivalent is completed by dividing the percent value by 100. After converting these numbers, multiply the wholesale price by the decimal value. This number is the markup value. Add the markup value to the wholesale price to find the item's selling price.

For example, a florist wants to add a 100% mark up to one floral product. The wholesale cost of this item was \$2.50. The first step is to convert the 100% mark up value to its decimal equivalent.

$$\begin{array}{rcccl} 100 & \div & 100 & = & 1.0 \\ \text{(percent value)} & & & & \text{(decimal equivalent)} \end{array}$$

The decimal equivalent is 1.0.

To calculate the markup value, multiply the wholesale price by the decimal value.

$$\begin{array}{rcccl} \$2.50 & \times & 1.0 & = & \$2.50 \\ \text{(wholesale price)} & & \text{(decimal value)} & & \text{(markup value)} \end{array}$$

The markup value is \$2.50.

Add the markup value to the wholesale price to calculate the selling price.

$$\begin{array}{rcccl} \$2.50 & + & \$2.50 & = & \$5.00 \\ \text{(wholesale price)} & & \text{(markup value)} & & \text{(selling price)} \end{array}$$

The selling price of the item is \$5.00.

In all pricing, it is extremely important to avoid waste as much as possible. If flowers and plants

are cared for properly, waste will be minimal and the florist will realize a higher profit. Designers must keep accurate records of the number of flowers and accessories used in arrangements and price them competitively. The best way to do this is to set a price for the arrangement, then select the flowers that will be needed for that arrangement price. These flowers should then be placed together in water before the designer ever begins working on the arrangement. To count the flowers after the arrangement is finished will waste time and add more expense to the arrangement in terms of labor.

Summary

Florists and their employees need to know how to determine prices for their merchandise. They may use either the ratio or percentage method, but should always keep their costs in mind when pricing the items in the shop.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Boor, Mary Ann. *Math for Horticulture*. Columbus: Ohio Agricultural Education Curriculum Materials Service, 1994.

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Redbook Florist Services Editorial Advisory Committee. *Retail Flower Shop Operation*. Paragould, AR: Redbook Florist Services, 1991.

Stratman, Teresa. *Retail Floriculture, Book 1*. Columbus: Ohio State University, 1976.

Lesson 4: Taking Inventory

Good business practices require a complete record of all merchandise sold and the value of the stock on hand. Because flowers and plants are perishable, the florist's stock is turned over almost every day and new stock is brought in. A large part of a florist's capital must be used for purchasing supplies, decorating materials, and accessories. The stock of supplies should be large enough to allow for efficient work at all times. The florist must be careful not to have too much of an item that is not used often, which can needlessly tie up money.

Some florists have one person in charge of inventory control. Others have employees in various departments checking on inventory and reporting to the department manager when inventory is getting low. Larger flower shops keep their inventory on computer. Computerized records enable them to know quickly what is on hand and what was paid for it. All items have a cost and a market value. The cost is what was paid for the item, and the market value is what it costs on the current market. For the purpose of inventory, the florist can use the lowest price.

What to Inventory

An inventory includes all flower shop supplies, related products, accessories, gift items, containers, and plant materials.

When to Inventory

A hardgoods inventory needs to be taken once a year, every 6-8 weeks, or especially prior to a major holiday. Some items need to be inventoried on a daily basis.

The Importance of Inventory

Inventory is important for several reasons. First, taking inventory is necessary in order to help in making a profit by allowing the flower shop to keep merchandise in stock. For his or her business to be successful and profitable, the florist must have items available for purchase.

Inventory must be taken for tax purposes as well as for insurance. It also serves as a guide to determine which items are moving slowly, or are overstocked or understocked. Inventory can help in determining the most profitable items a shop carries and money needs at various times of the year.

Inventory control helps keep high demand items on hand and prevents the shop from having too much of one item.

Turnover

Turnover refers to the cycle of purchasing, selling, and restocking items held in inventory. The florist's goal is to turn over inventory fairly quickly. Quick turnover is a necessity for plant materials, because they are perishable and their value decreases while they are stored. To avoid losses, purchases of plant materials should be made frequently and in small quantities. Hardgoods are turned over less frequently, usually every two to four months, depending on the type of item. Overbuying should be avoided because of the costs associated with holding inventory in stock. Not only are profits on those items lost, but the money cannot be spent on more profitable items.

Summary

Florists need to take inventory regularly in order to ensure that they have all the supplies and merchandise necessary to run a profitable business, as well as for tax and insurance reasons. Monitoring the turnover rate will help the florist to determine how much of each item to stock.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Liesveld, John H. *The Retail Florist*. 3rd ed. New York: Macmillan, 1957.

Redbook Florist Services Editorial Advisory Committee. *Retail Flower Shop Operation*. Paragould, AR: Redbook Florist Services, 1991.

Stratman, Teresa. *Retail Floriculture, Book 1*. Columbus: Ohio State University, 1976.

Lesson 5: Creating a Display

An attractive display in the window or the store is one of the best means that a florist can use to promote products. Good displays do not just happen. They must be carefully planned. Their purpose is to attract attention and encourage sales. Often a window display alone will give a prospective customer an impression of the shop and the kind of service it provides. To create an effective display, certain guidelines should be followed.

Procedures in Creating a Display

It is important to first select a theme. It should be a single idea, usually a holiday or a season. A theme can be based on certain merchandise and related items. Themes can also be based on current events. For example, during elections or political party conventions, a patriotic theme with a donkey or elephant could be used.

The seasons can be represented with appropriate colors for winter, spring, summer, or fall. Holidays are usually the easiest and most commonly used themes for displays.

Displays may also promote a special the store is conducting. If the store obtained a good buy on some baskets, for example, a display can be built around them.

After selecting the theme, choose the props and the merchandise to be promoted. Props are permanent items that are used in creating window and store displays. Stands are common props that help hold the merchandise at different heights. Stands can sometimes be as simple as stacking some boxes in the display. These boxes should then be draped or covered with material, foil, or paper. Other props include fountains, columns, seasonal figurines, screens, fireplace mantles, chairs, or even spinning wheels. Keeping a permanent collection of props is often beneficial. Wholesalers have many props that can be purchased. Props can be made using foam, core board, Styrofoam™, or poster board. Props can be rented or even borrowed. If a prop is borrowed from another business, give credit to that business

in the display, e.g. "Spinning wheel courtesy of Alan's Antiques."

Drapes of material, paper, or foil can serve as a background for the display. They are often stapled or taped to the stand.

The merchandise promoted can be anything that will lend itself to the display and that the shop desires to sell. Use accessories to complement the theme of the display. Florists must be willing to sell whatever they display in the window, so beware of using something with which you do not wish to part.

If appropriate, include signs pricing the items offered for sale. Customers dislike having to ask how much something costs.

It is often helpful to make a rough drawing of how the display should be set up. A sketch helps the designer make the display according to plan. When setting up the display, however, it sometimes becomes obvious that the original idea is not going to work. If this happens, the designer must be flexible enough to change plans.

Designing a good display is somewhat like designing an arrangement since the same rules of design should be incorporated. Always include a focal point, for this one feature will attract the customer. The focal point needs to stand out from everything else in the display. Avoid placing it directly in the middle of the display.

Items included in the display should all be related. Keep the background very simple, preferably plain. If it is too bright or "busy," the background will detract from the main theme.

Place all the shorter items toward the front of the display with the taller items toward the back. A good practice is to walk past the display several times and look at it critically to see if it attracts your attention.

Make sure all of the colors are harmonious, and use a variety of shapes, sizes, and textures.

The next step is to actually set up or create the display. If a window display is planned, make sure the window is clean inside and out. Remember to

check the lighting fixtures, too. A burned out light bulb is often difficult to change after the display is completed.

If merchandise and props need to be cleaned or painted, be sure to do so well ahead of time. Paint must be allowed to dry before handling. All merchandise needs to be clean and of good quality.

Prepare the background and floor of the display by covering them if necessary. Place the boxes or stands in position, then cover them with material, paper, or foil drapes. Take care that people walking by are not able to see the back side of the display.

Gather and prepare other props and accessories to be used. Foam core board may be used to create a background to which various things can easily be pinned. If using lights, make sure they accent and do not detract from the display.

Add other items related to the main theme. As always, their colors should contribute to the theme and harmonize with the other objects in the display.

Price tags should be hidden unless the item priced is part of a special or sales promotion.

Maintaining Display Areas

Once a display has been created, the designer's work does not end. Displays require maintenance, usually on a daily basis.

Check all live plants daily for watering needs. Remove any dead foliage or blooms. Keep the floors, display areas, and display coolers clean and free of dust. Clean all windows, especially display cooler doors, daily. Maintain a comfortable temperature in the sales area. Replace all burned out light bulbs. Keep painted surfaces fresh and free of chips.

Displays need to be changed often. Add new combinations of merchandise. If an item does not sell, place it in a different grouping, put it on sale, or store it away for a while.

Importance of Displays for Merchandising

Effective and attractive displays can help generate more sales. While customers are browsing or waiting to pick up orders, a well designed display can encourage them to purchase more. A good display should attract attention, arouse interest, inspire a desire to possess the product, and encourage its purchase.

Elements of a Good Display

Being able to evaluate a display after creating it is very important. When looking at the display critically, look for several elements.

- Is the display pleasing to the eye?
- Is the main theme easily noticed? Does it catch the eye?
- Is the display well lit?
- Are all items clean and in good condition?
- Are the colors complementary and pleasing to the eye? Do the colors complement and coordinate with the theme? For example, pastels are used for spring, brighter colors for summer, etc.
- Are the rules of color followed?
 - Use very bright and contrasting colors sparingly.
 - If very intense colors are used, keep the area small and the contrasting colors less bright.
 - Select colors that will complement the items displayed.
- Does the display adhere to tips of designing a display?
 - The display should arouse interest.
 - Do not use too many items that will compete for attention.

- All props should tie in with the featured product.
- Never mix different styles.
- If creating a window display with an open back, make it attractive both inside and outside the shop.
- Keep lights on in the display window after the shop is closed.

Safety Factors in Setting Up Displays

Several safety factors should be considered when designing a display. Add proper support for everything displayed. Make sure all electrical equipment and lights are safe and are not fire hazards. Use materials that are not flammable. Do not block shop entrances or exits with the display. Try to avoid using sharp edges or corners in the display.

Stocking and Displaying Merchandise

When opening a case of merchandise, be careful not to damage anything inside, especially when using a knife. Before displaying any piece of merchandise, calculate the item's retail price, clean and dust the item, and clean the shelves. Place newer items behind the older merchandise, and be careful not to place anything too close to the end of a shelf. Group similar products

together, and use labels that can be easily read. Finally, clean up and throw away any boxes or other garbage, then put away any tools.

Summary

A well designed display is a valuable asset in attracting customers and selling merchandise. A good display incorporates the elements of design and is neat and clean.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Griner, Charles. *Floriculture Designing and Merchandising*. Albany: Delmar Publishing Inc., 1995.

Hunter, Norah T. *The Art of Floral Design*. Albany: Delmar Publishers Inc., 1994.

Liesveld, John H. *The Retail Florist*. 3rd ed. New York: Macmillan, 1957.

Redbook Florist Services Editorial Advisory Committee. *Visual Merchandising for the Retail Florist*. Paragould, AR: Redbook Florist Services, 1992.

Stratman, Teresa. *Retail Floriculture, Book 1*. Columbus: Ohio State University, 1976.

Lesson 6: Maintaining the Flower Shop

A customer's first impression when entering a flower shop is often the most lasting. It is therefore important for the shop to be neat and clean at all times.

The Importance of Maintenance

The floral shop must be maintained to keep it neat and clean, which gives customers a favorable impression when they first enter the shop. In addition to creating a good impression, a clean and well maintained shop is a safer environment for customers and employees alike. If debris is cleared from the floor, the chance of anyone slipping and falling is lessened. Keeping dust to a minimum also helps employees with allergies.

Maintaining the Display Area

To maintain the display area, several things must be done.

Floors must be kept clean. If the floors are carpeted, they should be vacuumed or swept daily. If they are wood, they should be polished daily.

All display areas and merchandise on display should be dusted.

All aisles should be cleared.

Check all lights to make sure none are burned out.

Window displays should be clean and free of dust, spider webs, or dead insects.

The following equipment should always be on hand to aid in cleaning. Paper towels and rags, window cleaner, furniture polish, a dust pan, a mop and broom, and a vacuum cleaner are all needed to clean and maintain the flower shop. The vacuum cleaner will prevent dust from settling, and its attachments will save on time and labor spent in cleaning.

Maintaining the Design Area

Maintain the design area by periodically cleaning the floor. Designers often throw stems and waste

on the floor as they create arrangements. If this material is allowed to build up, it can create a safety hazard, so the stems and waste should be removed periodically.

Dust and dirt in the design area should be kept at a minimum. Surplus items are usually stored in the design room, and some of them may be difficult or impossible to clean once they have been soiled.

Maintaining the Cooler

The cooler is another area of the shop that must be kept clean, particularly since it often doubles as a display cooler that will be seen by customers. The bottom of the cooler, as well as the glass doors, should be cleaned inside and out daily.

If the cooler doubles as a display cooler, it should make a favorable impression on customers. If it is used solely as a storage cooler, it should be maintained for efficiency and easy access. In either case, dead and decaying plant materials must be removed from the coolers. Besides having a poor appearance, dead and decaying flowers and foliage generate ethylene gas. This gas causes the flowers stored in the coolers to begin early senescence, or aging.

Disposing of Plant Waste

Plant waste disposal can be a difficult task. Some shops have a bin or hole in which to sweep plant wastes. Depending on the area, some municipalities require separation of flower and foliage waste from wire, paper, etc. Keeping two different containers to sort the waste may be necessary.

Summary

All areas of the flower shop, including the display and design areas and the coolers, must be maintained to make a positive impression on customers, to create a good work environment for employees, and for safety reasons.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Floristry

Redbook Florist Services Editorial Advisory Committee. *Retail Flower Shop Operation*. Paragould, AR: Redbook Florist Services, 1991.

Stratman, Teresa. *Retail Floriculture, Book 1*. Columbus: Ohio State University, 1976.

Lesson 7: Advertising

Advertising is essential in running a successful business. One of the most important decisions florists must make is how to spend the money they have budgeted for advertising to obtain the best results.

Methods of Advertising

A flower shop can advertise in a number of different ways.

The very best form of advertisement is a happy customer.

By using the newspaper, the florist can time the message to the occasion. Newspaper ads are very flexible. Scattering several small ads throughout the paper is sometimes more effective than placing one large ad. Newspaper ads are more effective if they are run regularly to keep the florist's name in the public eye.

Spot announcements on the radio are also a good means of advertising. The best times to run commercials are just before or after popular programs, newscasts, and weather information.

Television is a very popular medium, but it may be too expensive for an individual flower shop. Floral wire services usually make good use of television's visual appeal.

The flower shop, store signs, and window displays are also a means of advertising. Depending on the location of the shop and its exterior, they can attract attention. People often stop to look at window displays, then enter the shop when something in the display interests them.

The signs on the sides of the delivery van need to be attractive. The van, too, needs to be well kept because it will advertise the shop everywhere it goes. A careful and courteous driver also reflects well on the shop.

Florists can also advertise through direct mailings by enclosing promotional literature with bills. Issuing a calendar with the shop's name and logo on it is an important year-long advertising tool. A

mailing list of customers is important to maintain since it gives the florist a good base from which to start a direct mailing campaign. Seasonal promotions as well as notices of special sales and offers may be mailed out to customers.

The yellow pages of the telephone book are a form of advertising preferred by many florists, for customers often turn to the yellow pages to choose a florist.

Billboards may be seen by passing motorists. Individual florists do not usually advertise on billboards, but floral organizations do. A billboard message should be short and able to catch the motorist's eye. If it takes too long to read, it will not be read.

Some florists distribute pencils, calendars, and other items with their name and telephone numbers printed on them.

Most florists have business cards for individual designers to include with the arrangements. If customers are especially pleased with a particular arrangement, they may request that designer again.

Holding an open house in the flower shop is another important form of advertisement, especially during the Christmas season. Many florists find it to be a very profitable method of advertising and drawing people into their shop. A day is set aside for the open house, and seasonal arrangements in various price ranges are prepared. Refreshments are optional but will help to attract customers. Notices for the open house should be mailed to all regular customers, and an invitation should be printed in the local newspaper.

Being active in the community, belonging to such groups as the Lions Club, Jaycees, or Chamber of Commerce, giving talks, and sponsoring local events puts the florist and the shop in the public eye.

Ingredients of an Effective Print Ad

Several ingredients go into creating an effective print ad.

- Attracts attention

Floristry

- Sparks interest
- Inspires customers to buy
- Reads simply and easily
- Uses the shop's name and logo
- Uses a good design
- Uses pictures that draw interest to the ad
- Varies in print size

Benefits of Advertising

Every business needs to advertise in some way. Shop owners cannot afford NOT to advertise. They must keep their names in the public eye. Even longtime customers need to be reminded of the shop's presence.

Summary

Every flower shop needs an advertising budget. The major decisions are how much to set aside for advertising and what method or methods would best represent the shop.

Credits

Anderson, Gary A. *Floral Design and Marketing*. Columbus, Ohio: Ohio State University, 1988.

Liesveld, John H. *The Retail Florist*. 3rd ed. New York: Macmillan, 1957.

Redbook Florist Services Editorial Advisory Committee. *Retail Flower Shop Operation*. Paragould, AR: Redbook Florist Services, 1991.