

Chapter 9—Greenery, Transplants, and Floral Products

Description of the Product and Its Uses

The Pacific Northwest has probably been more active than any other region in the use of public and private forest lands to provide a diversity of decorative floral greenery, transplants, and forest botanicals for the floral market. A few of the most commonly harvested products for the floral market are mentioned below (table 9–1). The appendix has more information on several of these.

Beargrass (*Xerophyllum tenax*). Once used commercially only for making baskets, beargrass is not a true grass but rather a lily. Its long-stemmed, coarse, low-lying leaves are finding great popularity in floral arrangements. These leaves are durable and accept many natural and manmade dyes. This product has been touted by some floral greens wholesalers as the highest volume European export of all the special forest products.

Ferns. Sword fern (*Polystichum munitum*) is probably the most commonly harvested fern, at least in the Pacific Northwest. Ferns are harvested year-round, but quality during early spring is usually poor.

Evergreen huckleberry (*Vaccinium ovatum*). Evergreen huckleberry is primarily used in floral sprays. The best months for picking are May and July. One form has deep green, glossy leaves, and the other, known as “red” huckleberry, has red-tinged leaves.

Moss. There are numerous varieties of moss. Sheet moss, angel hair moss, and antler moss, for example, are purchased from harvesters in the Upper Great Lakes. The latter two types are found on dead or dying branches of tamarack or spruce in swampy areas. The best time to harvest moss is in summer, when it is more likely to be found dry. Otherwise, the needed drying process may not be worth the cost.

Salal (*Gaultheria shallon*). Long regarded by timber managers as a weed, salal is a shrubby evergreen with glossy, green, leathery leaves. It is harvested year-round, but it must be inspected for leaf deformities, spots, and insect damage before harvest. It is used by the floral market in several forms and sizes.

Scotch broom (*Cytisus scoparius*). This green plant is harvested from September through May, since buyers want straight shoots without new leaves or blooms.

Other widely used plants are baby’s breath (*Gypsophila paniculata*), holly (*Ilex* spp.), and the boughs of nearly every evergreen tree species in the Pacific Northwest. These include the Pacific silver fir, subalpine fir, Noble fir, lodgepole pine, western white pine, Douglas-fir, juniper, incense cedar, and the western red cedar. Cattails, deer fern, manzanita, Oregon boxwood, pearly everlasting, and corkscrew willow are also harvested. In addition, entire trees and plants are frequently dug and sold to landscape and garden centers.

Table 9–1. Commonly harvested forest floral and greenery products for commercial markets

Agave stars	Deer tongue	Manzanita	Rhododendron
Alder tops	Dogwood	Mistletoe	Salal
Baby's breath	Dragonwood trees	Mountain hemlock	Scotch broom
Beargrass	Dwarf Oregon-grape	Mountain laurel	Smilax
Birch tops	Evergreen huckleberry	Ocotillo stems	Spanish moss
Bittersweet	Fir boughs	Oregon boxwood	Sphagnum moss
Blueberry or Rocky Mountain juniper	Galax	Pachistima	Spruce boughs
Brittlebrush	Gopherwood	Palmetto spears	Sumac
Cattails	Holly	Pepper berries	Sword and long fern
Cedar boughs	Ironwood tops	Peppergrass	Teasel
Cedars, particularly Port-Orford	Leucothoe	Pine boughs	Vine maple
Chaparral stems	Lotus pods and seeds	Princess pine	Wax myrtle
Club moss	Magnolia	Pussy willow	White birch bark
Creosote stems			

Nationwide, the most widely sold specialty forest product may be evergreen boughs used to make wreaths. Many States have large wreath-making industries. For example, in Minnesota the bough and wreath business amounts to an estimated \$10 million in sales for both commercial and individual entrepreneurs. There are hundreds of local people who cut boughs, primarily from balsam and white pine, and sell them to local buyers who represent bough and wreath companies. Not all wreath making is for the holiday market, either. For example, birch branches and other materials are used to make twig-type wreaths that are sold year-round.

An example of relatively new products being harvested in the upper Midwest are birch, ironwood, and alder tops. Trees of about 3-inch diameter at the base and about 6 to 10 feet tall are harvested for their branch formation. The tops are shipped out of State, where artificial leaves are added. These trees are then used as decorative "lifelike" trees in shopping malls and hotel lobbies. Estimated production is 80,000 to 100,000 trees annually.

Some floral products that are harvested, such as peppergrass and baby's breath, are actually considered noxious weeds in some of the States in which they grow.

The forest land being harvested may be either publicly owned or privately owned. According to the study by Schlosser and Blatner (1989), harvesters secure a high portion of their picking rights through harvest lease arrangements.

Harvesting entire trees and other forest plants for sale to nurseries and garden centers as transplants has become a rapidly growing component of the special forest products industry, particularly in the Northwest. For example, in 1991 the Randle Ranger District in Washington sold 900 transplants; by April 1992 that same number had already been sold. The most popular species have been mountain hemlock, lodgepole pine, subalpine fir, and noble fir. Vine maple (popular for its stressed appearance, which gives individual trees "character") also has been popular with landscapers. Demand for transplants of beargrass and cattail roots for nursery stock has also been increasing. Even very small seedlings can be harvested from the forest and used for various purposes—as free promotional gifts from realtors, for example.

Market and Competition Considerations

Markets have been steady or increasing for many floral, greenery, and transplant products. A 1989 study of special forest products and producers west of the Cascade Mountains in Washington, Oregon, and British Columbia estimated that total annual sales that year were over \$47.6 million. The total value of the special products industry (sales plus wages and salaries, profits, taxes,

etc.) was estimated at over \$128 million (Schlosser and Blatner, 1989).

In Washington's Randle Ranger District alone, the annual volumes of plant materials harvested under permit with the Forest Service have included 7,000 pounds of huckleberry brush and 5,000 pounds of pearly everlasting. In the past, the Forest Service has generally sold these products under a commercial use permit system. Under the permit system, the Forest Service establishes prices at the beginning of the season as well as the conditions for the permit. (Information is summarized on a "green sheet.") Most permits have a 2-week time limit, and there are minimum purchase amounts under the permits. (For example, a harvester may be required to purchase \$600 worth of beargrass.) A description of information required when filling out a specialized forest products harvesting permit and the green sheet permit conditions for forest greens and boughs are given in the appendix.

In the Randle Ranger District, harvesters pay the Forest Service between 5 and 10 cents per bunch for many of the floral products. (A bunch is equal to between 3/4 and 1 pound, depending on the plant.) The following are what buyers were paying in 1991 for these products (table 9-2).

Table 9-2. Buyers 1991 prices for specialty forest products

Item	Price/pound	Price/bunch	Price each
Beargrass	\$1.00-\$1.60 ^a	Avg = \$0.65	
Salal	\$1.00	\$0.90	
Ferns			3/4 to 1 cent
Scotch broom	\$0.32 ^b	\$0.32	
Huckleberry brush	\$0.48		
Moss ^c			
Sheet	\$0.50		
Angel hair	\$2.00		
Antler	\$2.00		
Boughs			
Noble fir	\$0.32		
Cedar	\$0.17		

^aDepending on the month, with December prices being highest.

^bIn September when not flowering.

^cIn Wisconsin.

Generally, buyers sort and box the various materials and then sell to one of a few large floral houses. Several small buyers may sell to the same company.

Transplants can be profitable for harvesters. The Randle Ranger District charges harvesters \$1 apiece for trees between 1 and 6 feet high, and \$2 apiece for trees over 6 feet high. The average price that harvesters receive for

these trees at nurseries is about \$15. Trees under 1 foot are sold from the national forests for only a nickel apiece. Vine maple that the Forest Service sells for \$0.50 each (and a private timber company may sell for \$2.50) can be sold for \$15 as well. It should be noted that the district uses these proceeds to offset needed maintenance and forest rehabilitation (for example, rehabilitation of huckleberry areas).

Success in the floral trade business generally requires emphasizing diversity and avoiding overdependence on seasonal products. A company may deal primarily in floral greens but use other products to fill the gap. Many of the products in the floral industry started out as weeds. For example, peppergrass is regarded as a weed in Florida, but the floral industry likes to use it, partly because it is unique to people not residing in Florida. Pepper berries are another example: there are huge tracts of land in Florida with invasive pepper berry trees and most landowners are glad to have people harvest them. Pepper berries are currently being shipped out of Florida by the ton.

Every area has interesting plants that grow locally. Some plants, like grapevine, grow wild in virtually every State. Most of the sheet moss used by the floral industry currently comes out of Tennessee and West Virginia. However, it also grows in upstate New York. It is possible that an entrepreneur in New York could start harvesting and selling locally grown sheet moss to wholesalers if the price were competitive. Certain grasses that can be dyed and numerous other examples of entrepreneurial opportunities exist. For example, the market for dried florals is relatively undeveloped. Many wild plants that have reached the mature, seed stage have interesting and decorative pods that can be used in dried floral arrangements.

Two notes of caution are needed. First, it is important with wild harvested floral products that an individual do a trial run to determine just how much time and expense is involved in the harvesting, drying, processing, packaging, and distribution of the product. Second, a lot of people make the mistake of pricing their product based only on what retailers are currently paying for similar products. But the price should be low enough to protect future profit margins of wholesalers as well as retailers. When this is not done, it becomes impossible to expand the business because one cannot sell to wholesalers for the same price as to retailers. If the entrepreneur reduces the price enough to interest a wholesaler, he or she must be able to immediately make up the difference in greater volume, but too often there is no way a small company can quickly produce enough to fill a large company's orders. Being able to sell to wholesalers is important because, for these types of products, the most successful entrepreneurs will be those who make their profits

through volume rather than by selling at a high per unit basis. This strategy requires a commitment to building a business slowly rather than trying to "get rich quick."

Distribution and Packaging

An entrepreneur with a new idea has to find wholesalers or jobbers who handle a volume of different floral or potpourri products. The Wholesale Florist and Florist Supplies Association in Arlington, Virginia, is a potential source of information on wholesalers. However, to become a member, a wholesaler must do at least \$250,000 in business.

Channels of product distribution and distribution regions of floral products from the Pacific Northwest are discussed by Schlosser and Blatner (1989). In the case of Northwestern products such as salal, ferns, and huckleberry, it was found that only 17 percent of the floral greenery being harvested was sold in the region. About 52 percent was sold in other regions of the United States. About 28 percent was exported, with the vast majority of the exports going to Europe (Walls et al., 1991). On the other hand, some products such as baby's breath and leatherleaf fern that are widely used by florists in the Pacific Northwest are actually imported from Florida or Central America.

Beargrass in particular is an important export product that is largely sold overseas to Holland and Germany. Beargrass is typically sold in boxes of 28 inches by 12 inches by 5-1/2 inches, containing 40 bunches of beargrass of about 1/2 pound each, or about 20 pounds of beargrass. Prices vary greatly according to availability and demand. But a U.S. company that sells one or two boxes a week to U.S. buyers might sell upwards of a thousand boxes a week to Europe. (In general, consumers in the United States buy about 2 pounds of floral products annually, compared to 14 pounds annually for Europeans.)

Some industry spokespersons feel that the evergreen bough market in Europe is virtually controlled by producers in Denmark. Trade barriers in foreign markets have been a major concern of U.S. evergreen bough marketers, particularly European claims of concern over disease and pest control related to fir boughs, which U.S. companies believe to be unfounded.

Indications are that exports to Europe and Pacific Rim countries would increase substantially if more efficient means of product preservation were developed for the more perishable greenery products. Boughs must not be allowed to dry out. Cedar especially will sour if not kept damp and cool. There are also indications that European buyers are increasingly demanding that all packaging materials be biodegradable.

While some in the nursery business feel that many forest transplants do not survive well or grow well in microenvironments quite different than where they grew, most large nurseries in reality will only buy from reputable, experienced harvesters who guarantee the viability of their trees, and to replace any that die. Skilled harvesters often go into an area in October, cutting back the roots of the trees that they will return to dig in the spring. They also have special techniques to reduce stress, like using burlap that has been treated with vitamin B-1 to reduce shock.

Labor and Equipment Needs

The harvesters of the greenery products in the Northwest are mostly Cambodians and Mexicans. Typically, they are self-employed, part-time seasonal workers. If the harvests occur on national forests, the harvesters are responsible for obtaining the necessary brush permits, usually from the county sheriff's office. Harvesters generally sell to a broker or buyer who checks, weighs, and pays for the products either at a buying station or at a company location. Greens are appraised and sold by the bunch, boughs by the ton, and trees for boughs on a per tree basis based on size. The company is generally required to have a State hauling permit as well.

Driers and digital scales are generally the most expensive items for a wholesaler, but they are not needed when a business is just getting started. The driers cost about \$8,000 apiece and the scales cost about \$900. Some wholesalers dealing with natural products use a drier originally developed for peanut farmers for drying peanuts.

Resource Conservation Considerations

Resource managers should require that holes be filled in and the area scuffed up to camouflage the filled holes. Also, managers should be aware that experienced harvesters can dig and remove a tremendous amount of plant material in a very short time. A two-member team can dig and remove one 6-foot tree within between 40 seconds and 1/2 minute. Two people can remove 200 to 250 trees in 3 hours. A family of four can pick 400 pounds of salal in 4 to 5 hours.

Poaching is still a large problem in many national forests. One special forest products specialist with the Forest Service estimated that the Forest Service is getting paid for only one-fourth of what is being removed from the public forests. Beargrass, salal, and firewood may be the most frequently poached items.

Land managers should also be aware that by selectively selling small evergreens, vine maple, or other floral products out of an area that is scheduled for a timber sale,

much of the material that would otherwise have to be removed as slash from an area can be removed by harvesters, thereby benefiting both them and the public agency. It is important that the harvesters have access to the area enough in advance of the timber cutting that they can salvage as much as possible. (For example, boughs can be cut out of an area in the fall and the logging done in the spring.) The effort involved for a precommercial thinning operation can also be greatly reduced if an area is opened first for cutting Christmas trees.

Some Forest Service districts have begun using a highly modified timber sale contract called a "stewardship contract" as a mechanism to sell units of precommercial thinning size stands of Noble fir and other species to contractors under this form of contract. Both the Forest Service and the participating contractors have been satisfied with such arrangements. The stewardship contract is designed to allow the contractor to develop stands of trees for boughs, Christmas trees, and other products to suit his or her needs and to maintain the area over a 6-year period. With this longer time horizon, the contractor is able to develop an inventory or materials to fill orders as the market demands. Near the end of the contract period, the contractor is required to precommercially thin the units, which saves the Forest Service an estimated \$80 to \$120 an acre. The contracts themselves earn about \$300 per acre, for a total earnings of nearly \$400 per acre. The concept has been very successful in the Gifford Pinchot National Forest, for example, where it has been used since 1988. The region is in the process of developing a specific contract for other special forest products.

Some forest lands that are managed by State departments of natural resources are also being managed for floral greenery products. For example, the Washington Department of Natural Resources sells boughs, brush, and Christmas trees under lease or sale contracts. Leases, generally on a per acre cost basis, are the most common method of sale. Demand for brush leases has been rapidly rising. Leaseholds range from 40 to nearly 6,000 acres and annual rent averages \$1.90 per acre.

Any harvester should be certain a product is (1) not on the rare or endangered species list and (2) bountiful and reproduces rapidly. Done correctly, harvesting methods applied to plants used in the floral trade amount to pruning and do not kill the parent plant. In the near term, there appears to be no large concern about overharvesting. However, it does require time for the plants to regenerate. For example, it takes beargrass about 3 years to fully grow back after the core of the plant has been cut off. As the market for floral greenery products expands, the potential may well increase for overharvesting or mismanagement of the resource. Harvesters need to be educated about the resource and their craft and be taught methods of sustainable harvesting.

Special Factors

It has been suggested that, pound for pound, special forest products may be worth more in many areas than the timber value of trees growing in the same spot. Some Forest Service personnel feel that the price the Forest Service charges for brush permits is so low that the materials are being virtually given away.

Further, it has been suggested that permits are seldom checked by the Forest Service. There is also no system to weigh the materials collected to ensure that only the amount specified in the permit has been actually harvested.

Large private timber companies that could lease land to harvesters have been slow to try it because of concern over liability for injuries to harvesters on their property. One possible solution would be for the companies to sign with a buyer network or cooperative which would assume liability for personal injury or property damage while on the private lands (Walls et al., 1991).

Many harvesters do not speak English. Harvesters must be educated about the legal process for gaining the right to harvest in specific areas owned by public and private entities, and their responsibilities in the use of public facilities. Methods must also be found to ensure better cooperation among harvesters and others who use the forests.

Research is needed on cultivation techniques, the control of leaf diseases, and finding ways to make local greenery more appealing to regional consumers. Colleges and universities also need to get involved in researching claims such as those affecting the export of evergreen boughs to Europe.

Profile

Don Fineout is owner of Natural Crafts, Inc. of Williston, Florida, a supplier of a wide variety of products to potpourri and floral markets. Although the business started with virtually nothing only 5 years ago, it has grown to become a multimillion dollar company, with \$300,000 to \$400,000 in equipment, employing 35 people, and shipping materials all over the world. In 1991, the company had a 322 percent increase in business.

The company has been especially successful in the floral trade. They have been able to become cost competitive with overseas floral prices by keeping labor costs competitive, by focusing on volume, and by achieving cost efficiencies in packaging and shipping. Their company is the largest UPS shipper in their 11-State district.

Natural Crafts is currently the largest shipper of Spanish moss in Florida. Numerous other Florida products are shipped, including palmetto spears, peppergrass, dragonwood trees, wax myrtle trees, hickory nuts, date nuts, lotus seeds, lotus pods, pepper berries, poke root, and deer tongue. A few products, like sheet moss, are harvested in other States and shipped to them for wholesaling. The company also sells grapevine wreaths produced locally out of natural Florida grapevine.

Local harvesters are encouraged to bring in interesting and abundant materials that have potential value to the potpourri and floral markets. If there is sufficient quantity available, samples are sent to numerous potential distributors. Distributors are always looking for new and different natural products to offer retailers. If there is interest, the company can usually sell a large volume of the product. As an example, Natural Crafts recently introduced hickory nuts to the potpourri industry. The market expanded from nothing to over 30,000 pounds of hickory nuts in just 1 year.

The company's harvesting is done by local people all around the State. Many of the harvesters have permission to harvest from private lands on a regular basis. They are paid on the spot for what they bring in. For some, it is an important source of supplemental income. But for many, it is the family's only source of income. A typical family might bring in 1,500 to 2,000 pounds of Spanish moss a week. The company pays 20 cents a pound for the moss and the family is able to make \$300 to \$400 a week. A number of these are Mexican families who have had a hard time finding work between farm jobs. Some are transients, but others have been harvesting for the company for years.

The company deals in very large volumes. Natural Crafts annually ships 10 tons of poke root, 2,000 tons of Spanish moss, and 30,000 to 40,000 tons of deer tongue. They can sell as many hickory nuts, lotus seeds, and many other products as harvesters bring in. Products are also shipped to Italy, France, Belgium, Holland, China, and Japan. In 1990, an estimated 20 tons of peppergrass were sold to Germany.

Mr. Fineout works entirely through distributors and sells to 45 different private labels. The company has never once needed to advertise. Dealing through distributors is preferable to dealing directly with retailers because they are paid by the distributor rather than by each of 200 retailers. Also, the distributor is in a position to know the customer a lot better.

Mr. Fineout feels that any area in the country has numerous naturally growing or agricultural products that, if looked at in a new light, probably could be harvested, processed, and sold to the flora and/or potpourri markets if prices were kept realistic.

Considerations for a Rural Development Strategy

One important component for a development strategy to add value to floral products would be to systematically work to educate the floral industry about the different uses of natural products. Floral industry design schools are strong determinants of future demand in arrangements. A marketing effort aimed at these institutions would be very important to the long-range strength of these products in the market. At the same time, close coordination would be needed between the harvesting process and the floral industry to be certain that a material is not being promoted for arrangements during a time of low supply in storage or in the field.

Information on how to cultivate private lands for materials suitable for the floral industry is needed by small timberland owners. There is little literature available on how to grow many of these plants and what sort of productivity to expect in different areas.

An infrastructure conducive to the harvest and storage of floral greenery is needed in conjunction with any strategy. During high periods of harvest, especially for seasonal products, available storage can be quickly filled. The development of hydrocooling and cold storage stations throughout a forest region should be investigated.

Floral greenery houses and harvesters could benefit from a cooperative to help improve the quality of the product and thereby generate higher prices for the producer and less waste for the buyer. At the same time, harvesters cannot concentrate on a single crop because of the seasonal nature of special forest products. A cooperative would allow producers a facility in which to sort and grade material, pack it, and store it for shipping during months of low supply and high demand, and thereby maintain a steady supply of product and a more stable income. A cooperative would also allow a vehicle to develop value-added industries that would put more money back into the rural communities. Or, materials could be "branded" to ensure name recognition of high-quality goods or services provided by a cooperative.

The stewardship contract would be one mechanism that could be expanded to realize more value for floral industry products. The stewardship contract is used for a longer-than-normal period, typically 6 years, and the bidder has the opportunity to do whatever he or she would like within the 6-year period to manage the materials. The contract also specifies the residual conditions required on the ground, (for example, preference to certain species such as Noble fir) at a specified spacing. The Forest Service has received up to \$300 an acre for stewardship contracts governing combination boughs and trees, and is saving about \$100 an acre in

labor costs for the thinning. The contract system is being expanded to include harvesting of floral greens such as salal and ferns, but it has not been nearly as attractive or as profitable as the Noble fir business. Leasing 10 or 15 acres for about 12 years to individual households to grow and harvest many of these species is being considered.

The use of traveling educational and marketing exhibits about such specialty agroforestry products as floral greenery has also been recommended (Walls et al. 1991). These displays could be used at trade shows, fairs, and seasonal events to create a diverse and multicultural demand for a wide range of agroforestry products. More trade shows and educational workshops on cultivation, harvesting techniques, and marketing would also benefit the industry.

Finally, established product grades are needed for many special forest products. These would make appraisal of raw material easier.

Contributors

Don Fineout, Natural Crafts, Inc., P.O. Box 248,
Williston, FL 32696. 904-528-3507.

James Freed, Cooperative Extension, WSU/Mason
County, 9 Federal Building, Shelton, WA 98584.
206-427-9670.

John Krantz, Minnesota Division of Forestry, 500
Lafayette Road, St. Paul, MN 55155-4044.
612-296-6491.

Robert Mayer, Forest Products Utilization and Marketing
Supervisor, P.O. Box 283, Connersville, IN 47331.
317-825-6769.

Jack Pilon, Forest Products Specialist, Box 128,
Roscommon, MI 48653. 517-275-5151.

Bill Rogers, Florida Department of Agriculture and
Consumer Services, Division of Marketing, Mayo
Building, Room 413, Tallahassee, FL 32399-0800.
904-488-4366.

Robert Zacher, Special Products Coordinator, Randle
Ranger District, Highway 12, Randle, WA 98377.
206-497-7565.

Bibliography

Budd, W.W.; Duchhart, I.; Hardesty, L.H.; Steiner, F.,
(ed.). 1990. Planning for agroforestry. Papers pre-
sented at an international symposium held at Wash-
ington State University, Pullman, on April 24-27,
1989, Elsevier Science Publishing Company, Inc.,
New York, NY. [Page nos. unknown].

Buhaly, Joseph G. 1981. Harvesting evergreen brush and ferns. Extension Bulletin 0721, Cooperative Extension, Washington State University, Pullman, WA.

Blatner, Keith A.; Schlosser, William E. 1990. The special forest products industry 1989. Information Series No. 39. Available from the Impact Center, Washington State University, Hulbert 104, Pullman, WA 99164-6214. 509-335-6653.

Drake, Elizabeth; Beltran, Delana. 1983. Directory of forest products. Pullman, WA: Washington State University Cooperative Extension.

Edsall, Marian S. 1985. Roadside plants and flowers. The University of Wisconsin Press, Madison, WI.

Karel, Leonard. 1973. Dried grasses, grains, gourds, pods, and cones. The Scarecrow Press Inc., Metuchen, NJ.

Oregon State University Cooperative Extension Service. 1963. Woodland handbook for the Pacific Northwest: a guidebook for Pacific Northwest woodland management. Oregon State University, Corvallis, OR.

Schlosser, William; Blatner, Keith; Chapman, Roger. 1991. Economic and marketing implications of special forest products harvest in the coastal Pacific Northwest. Department of Natural Resource Sciences, Washington State University, Pullman, WA.

Silber, Mark; Silber, Terry. 1987. The complete book of everlastings: Growing, drying, and designing with dried flowers. New York: Alfred A. Knopf, Inc..

USDA Forest Service. 1991. Categories of special forest products. U.S. Department of Agriculture, Forest Service, Olympic National Forest, Olympia, WA.

Walls, James; Freed, James; Myer, Joel; Crimp, Peter; Freed, Beth; Foseide, Julie; Coots, Jody. 1991. Agroforestry research project 1991. Cooperative Extension, WSU/Mason County, 9 Federal Building, Shelton, WA 98584. 206-427-9670.

Resources

Canadian Sphagnum Peat Moss Association, 460 Park Avenue South, Dept. FG, New York, NY 10016.

Archie Clapp, Director, Wholesale Florist and Florist Supplies Association, 5313 Lee Highway, P.O. Box 7308, Arlington, VA 22207. 703-241-1100.

Floral and Nursery Times, 629 Green Bay Road, Wilmette, IL 60091. 708-256-8777. Trade newspaper.

Florists Review Magazine, 3641 Southwest Pass, Topeka, KS 66611. 913-266-0888.

Flower News and *Floral Mass Marketing*, 549 West Randolph Street, Chicago, IL 60661. 800-732-4581. *Flower News* is the weekly publication for the floral industry; *Floral Mass Marketing* is a bimonthly publication directed to the floral and nursery product buyers at supermarkets, discount stores, variety stores, and top volume garden centers, as well as their wholesale suppliers.

Ingeborg Reed, Minnesota Everlasting Cooperative, 301 Pineywood Lane, Carlton, MN 55718. 218-384-3702.

Supermarket Floral Magazine, 7950 College Boulevard, Overland Park, KS 66210. 913-451-2200.

Sample Buyers

A Moment in Time, Botanicals, 9865 Mesa Rim Road No. 208, San Diego, CA 92121. 619-546-3111, fax 619-546-3110. Manufacturer of air-dried roses, peonies, coxcomb, and freeze-dried flowers. Tina Ellis, Owner.

American Oak Preserving Company, P.O. Box 187, North Judson, IN 46366. 219-896-2171, fax 219-896-3055. A variety of gyps, painted items, dyed and preserved foliage, wreaths, eucalyptus, bouquets, accent items, and new decorative product line. Charles K. Vorm, President.

Apache County Dry Goods, 1106 Second Street No. 195, Encinitas, CA 92024. 619-943-9369, fax 619-436-7158. Natural tree trunks, poles, and branches for the art tree and display industries, painted line, and natural grass. Craig Arnold, Owner.

Appalachian Root & Herb, Inc., 37 Center Street, Rainelle, WV 25962. 304-438-5211, fax 304-438-5211. Natural green sheet moss, dyed preserved lycopodium and reindeer moss, Spanish moss, grapevine wreaths. A.T. "Tim" Thomas, President.

Arty Imports, Inc., 3004 Irving Boulevard, Dallas, TX 75247. 214-630-7232, 800-527-0015, fax 214-951-7349. Handwrapped and poly-stem flowers, freeze-dried and parchment flowers, foliage sprays and vines, greenery and flowering plants, cactus, fruit, vegetables, berries, poinsettias, holly, PVC Christmas trees, wreaths, garlands, picks, mushroom birds, dough flowers. Don Rosenbaum.

Brush Across Texas, Dameron Manufacturing Corporation, 201 West Wall, Suite 401 East, Midland TX 79701. 915-699-1118, 915-682-5911, fax 915-684-8023. Bleached, preserved, dyed fillers: gypsophelia, German statice, broom bloom, yarrow, lapidium, wheat, pine cones, pods. Rodger S. Dameron, President.

Colorado Evergreen Florist Brokerage, Inc., 1120 North Lincoln Avenue, Loveland, CO 80537. 303-667-7550, 800-388-5459, fax 303-663-2276. Incorporate all natural and dried materials including dried flowers, preserved flowers, foliage, moss, natural and preserved trees, and wreaths. Jan K. Earle, President.

Horticultural Sales Company, 2059-I Blount Road, Pompano Beach, FL 33069. 305-975-0822, fax 305-977-0611. Rattanware—natural, painted; Christmas—wicker, vines, pine cones, wreaths; dried foliage—pods, mosses, oak leaves, cattails, baby's breath, statice, mushrooms, eucalyptus; trees—natural trunks, palm, bamboo, topiary, canvas; pottery—handpainted earthenware, large stoneware. Marc L. Cummins, President.

Meadowland Floral, Inc., P.O. Box 770440, Cleveland, OH 44107. 216-741-4499, fax 216-741-9299. The "Meadowland Creations" line of natural dried floral decoratives; the exclusive "Four Season Wreath Program," "Amish Country" wheat decorations; cornhusk wreaths, eucalyptus bushes, table arrangements, swags, and a variety of dried floral materials; "Best Bow" hand-tied Christmas bows in waterproof red velvet, traditional plaids, and contemporary fashion colors. Steve Zupan, President.

Mirsky, Inc., P.O. Box 874, Beaverton, OR 97075. 503-628-3167, fax 503-628-0647. Dried flowers, preserved foliage, herbs, roses, hydrangeas, wildflowers, greens; "EnviroPak"—the natural wrap. Helen Mirsky, President.

Quality Growers Floral Company, Inc., P.O. Box 1640, De Leon Springs, FL 32130. 904-734-3433, fax 904-734-0910. Moss. Mark Wickham, Owner/President.