



# Horticultural Business Opportunities in Lincoln County, Nevada

Holly Gatzke, Extension Educator with University of Nevada Cooperative Extension in  
Lincoln County

## SUMMARY

There are markets demanding horticulture products in Las Vegas and the surrounding areas. These markets are demanding large items such as 24"-36" potted trees that are expensive to transport, specialty plants and premium quality vegetables and fruit. A list of landscape trees and native plants that can be grown in the Lincoln County for southern markets is provided. Some of the vegetables and fruits that could be grown for premium markets are outlined. These markets do require high-quality products, and exceptional service will greatly help gain loyalty from the target market.

## INTRODUCTION

The Las Vegas area and new developments in southern Lincoln County provide a market for niche farm products. Niche products are produced and marketed to fill a specific market need. Niche products are known to provide alternative income streams that are often more profitable. Therefore, farms in Lincoln County are capable of adding horticulture crops to their hay production to increase profitability and potentially create jobs locally.

## METHODS

The horticulture opportunities in Lincoln County were derived from a combination of interviews, literature and knowledge of local growing regions and plants. Information on the type of plant materials desired by the new developments in southern Lincoln County

were collected from one-on-one interviews with developers, home builders and landscape architects of the communities. Plants on the developers' lists were sorted and screened for their capability for production in different regions in Lincoln County. Industry articles about wholesale nursery production and landscape industry trends were also researched.

## AVAILABLE MARKETS FOR HORTICULTURE PRODUCTS

### New Developments

Two new communities, Coyote Springs (CSI) and Lincoln County Land Act (LCLA) will be built in southern Lincoln County over the next five to 20 years. Developers will need trees, plant materials and sod for roadsides, medians, golf courses and parks. CSI is addressing a major portion of their needs through their

own greenhouse business and their contract with Star Nurseries. They feel they have enough materials for the next few building stages. CSI is looking for plant materials that add color for the future. The landscape architect for Pardee Homes (home developer for CSI) indicated it is challenged to get plants, especially at reasonable prices, which are larger in size, such as 48"-60" box or specimen trees and 15 gal or larger succulents or cactus. In LCLA, Olympia, the largest landowner, has determined a need for five to six foot trees. There will be a demand for an estimated 10,000 trees per year in 24"-36" containers for one of the developers starting in five years and running for 10 years. To service this need, nurseries would have to be established quickly in the county so that the trees could grow to the desired size before the development is being built. Both developments have indicated that they will use low water use plants, including native species.

A great potential for landscaping materials for these southern Lincoln County communities lies in selling products to the new homeowners or their hired landscapers for finishing their yards. These developments will require homeowners to complete their landscaping within two years of purchase.

**Las Vegas Fresh Product Demand**

Las Vegas is rapidly growing in population and in the high-end restaurant industry. There is a great demand for freshly-picked produce that has great taste, look and is grown with no pesticides in ecologically friendly conditions. Discussions with high-end chefs and natural food store managers indicate a huge demand for fresh local produce because little exists and they are forced to ship in produce from long distances. There are several chefs in major casinos ready to create business relations with local growers to get produce. Contact Cooperative Extension employees, Bob

Morris (Las Vegas), Holly Gatzke (Lincoln County) or Kynda Curtis (Reno), to get assistance with business relations with these markets.

**PRODUCTS DEMANDED**

The products in demand and most likely to create profits are those that cannot be transported easily or cheaply into Las Vegas. Products large in size, difficult to move, highly specialized or fresh and flavorful have the greatest business potential locally.

**Large Trees**

The greatest demand and likely advantage in landscaping plants grown in Lincoln County is large trees that are in containers ranging from 24" and up. These large trees can be produced in containers above or below ground or as bare roots in the ground. These larger trees take several years to grow depending on the size of starting plants and the trees' rate of growth. The price of large trees is substantially higher at \$200 and up to over \$1,000 per tree, depending on the tree's growth rate, rareness and appeal. The business of growing these trees takes considerable cash up front until the crop can be sold.

Below in Table 1 is a list of landscaping trees that can be grown in the different farming areas in Lincoln County.

**TABLE 1. LANDSCAPING TREES THAT GROW IN LINCOLN COUNTY**

<b>Suitable Growing Location: All of Lincoln County</b>	
Cold Tolerated: USDA ZONE 3 (-40°F) (Coldest Zone and Lowest Temperature Tolerated)	
<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
Quercus muehlenbergii	Chinquapin oak
Populus nigra	Lombardy poplar
Shepherdia argentea	Silverleaf

buffaloberry	
<b>Suitable Growing Location: All of Lincoln County - Continued</b>	
Cold Tolerated: USDA ZONE 4 (-20 to -30°F)	
BOTANICAL NAME	COMMON NAME
Platanus wrightii	Sycamore
Prunus cerasifera 'artopurpurea'	Purple-leaf plum
Fraxinus	Ash
Platanus occidentalis	American sycamore
Populus alba	White poplar
Juniperus chinensis	Juniper
Cold Tolerated: USDA ZONE 5 (-15 to -20°F)	
BOTANICAL NAME	COMMON NAME
Cercis occidentalis	Western redbud
Chitalpa tashkentensis hybrid	Chitalpa
Prunus cerasifera	Cherry plum
Pyrus kawakamii 'Bradford'	Bradford pear
Sophora japonica	Japanese pagodatree
Ulmus parvifolia 'Alee'	Alee elm
Platanus x acerifolia	London plane tree
Koelreuteria paniculata	Goldenrain tree
Maclura pomifera	Osage orange
Crataegus douglasii	Black hawthorne
Catalpa speciosa	Northern catalpa
Cold Tolerated: USDA ZONE 6 (5 to -10°F)	
BOTANICAL NAME	COMMON NAME
Parkinsonia hybrid 'desert museum'	Desert museum palo verde
Pistacia chinensis	Chinese pistache

Quercus buckleyi	Texas oak
Cedrus atlantica	Atlas cedar
Fraxinus velutina	Arizona ash
Chilopsis linearis	Desert willow
Lagerstroemia indica	Crape myrtle
Lagerstroemia indica 'catawba'	Catawba crape myrtle
Lagerstroemia indica 'cherokee'	Cherokee crape myrtle
Lagerstroemia indica 'potomac'	Potomac crape myrtle
Lagerstroemia indica 'powhatan'	Powhatan crape myrtle
Lagerstroemia indica 'seminole'	Seminole crape myrtle
<b>Suitable Growing Location: Caliente, Alamo, Rainbow Canyon, Rachel, Barclay</b>	
USDA ZONE 7a (0 to 5°F)	
BOTANICAL NAME	COMMON NAME
Acacia greggii	Catclaw Acacia
Populus fremontii	Cottonwood
Prosopis juliflora (tolerates saline soil)	Arizona Native Mesquite
Prosopis pubescens	Screwbean Mesquite
Prosopis velutina	Velvet Mesquite
Prunus caroliniana	Carolina Laurel Cherry
Quercus ilex	Holly Oak
<b>Suitable Growing Location: Caliente, Alamo, Rainbow Canyon</b>	
USDA ZONE 7b (5 to 10°F)	
BOTANICAL NAME	COMMON NAME
Prosopis glandulosa 'Torreyana'	Texas Honey Mesquite
Sophora secundiflora 'Silver Peso'	Texas Mountain Laurel
Vitex angus-castus	Chaste Tree
Washingtonia filifera	California Fan Palm

<b>Suitable Growing Location: Alamo, Rainbow Canyon, Hiko</b>	
USDA ZONE	8a (10 to 15°F)
BOTANICAL NAME	COMMON NAME
Bauhinia congesta	Orchid tree
Bauhinia congesta 'Lunariodes'	Pink orchid tree
Chilopsis linearis	Desert willow
Ligustrum lucidum	Chinese privet
Parkinsonia florida	Blue palo verde
Quercus virginiana	Southern live oak
<b>Suitable Growing Location: south of Alamo, south of Rainbow Canyon</b>	
USDA ZONE	8b (15 to 20°F)
BOTANICAL NAME	COMMON NAME
Acacia aneura	Mulga
Acacia salicina	Willow acacia
Rhus iancea	African sumac

### Specialized plants

The community developments in southern Lincoln County require an extensive amount of shrubs, flowers (perennial and annual) for golf courses, parks and roadways. To compete in markets of these smaller sized plants, it is essential to identify plants that are not produced by large mainstream nurseries. These would be specialized plants such as local native species. Table 2 lists shrubs, wildflowers and vines that are native to the area, suitable for the southeast communities and can be grown in Lincoln County. For these specialty plants, growing techniques will have to be developed to reproduce and produce healthy plants. Many native plants from desert environments are often more difficult to propagate and have slow growth rates. Therefore developing large quantities of stock and growing plants

large enough to sell will be more difficult and take more time.

**TABLE 2. NATIVE SHRUBS, WILDFLOWERS, CACTI AND VINES THAT COULD BE PRODUCED FOR LANDSCAPING**

<b>Native Shrubs</b>	
BOTANICAL NAME	COMMON NAME
Abutilon palmeri	Indian mallow
Atriplex canescens	Four-wing saltbush
Atriplex lentioformis	Quail bush
Baccharis salicina	Willow baccharis
Buddleia marrubifolia	Woolly butterfly bush
Celtis pallida	Desert hackberry
Cowania mexicana	Cliff rose
Dalea pulchra	Indigo bush
Ephedra nevadensis	Nevada jointfir
Ephedra viridis	Mormon tea
Epilobium canum	Hummingbird trumpet
Fallugia paradoxa	Apache plume
Guara lindheimeri	Pink guara
Rhus ovata	Sumac
Rhus trilobata	Triple leaf sumac
Rhus virens	Evergreen sumac
Salvia chamaedroides	Mexican blue sage
Salvia clevelandii	Chaparral sage
Salvia leucantha	Mexican bush sage
Santolina chamaecyparissus	Lavender cotton
Sphaeralcea ambigua	Desert globe mallow
<b>Wildflowers</b>	
BOTANICAL NAME	COMMON NAME
Baileya multiradiata	Desert marigold
Calylophus spp	Sundrop
Camissonia spp	Suncup
Dalea greggii	Trailing indigo
Erigeron divergens	Spreading fleabane

<b>Wildflowers - continued</b>	
Erigeron profusion	Profusion fleabane daisy
Oenothera spp.	Evening primrose
Penstemon spp.	Penstemon
Psilostrophe cooperi	Paperflower
Santolina chamaecyparissus	Lavender cotton
Thymophylla acerosa	Pricklyleaf dogweed
Zinnia grandiflora	Little golden zinnia
<b>Native Cacti</b>	
BOTANICAL NAME	COMMON NAME
Echinocereus engelmannii	Hedgehog cactus
Ferocactus spp.	Barrel cactus
Yucca brevifolia	Joshua tree
Yucca elata	Soaptree yucca
<b>Native Vines</b>	
BOTANICAL NAME	COMMON NAME
Vitis arizonica	Wild grape

### **Fresh Picked Produce**

High-end restaurants and natural food stores in Las Vegas or surrounding areas are interested in freshly picked, flavorful produce. Some products of interest are ripened on the vine or stem and include tomatoes, berries, stone fruits and melons. There is a great demand for freshly picked items such as tomatoes, greens, herbs, garlic, peppers, beets, snap beans, carrots, asparagus, artichokes, corn and summer squash. Chefs follow the slow food philosophy found on the website <http://www.slowfoodusa.org/> which emphasizes flavorful foods that are produced in an ecologically friendly manner. Grow heirloom varieties or any variety that is flavorful. Novelty items such as a variety of colors, mini-sized items

(such as 1" zucchini with the flower attached) or any edible, unique-looking product is desired. Chefs prefer products like those found on the web-based store, The Chef's Garden (<http://www.chefs-garden.com>). Fresh items mentioned on the Food Network (<http://www.foodnetwork.com>) are highly sought by the public. More information on the food industry can be found at <http://specialtyfood.com> and <http://www.marketresearch.com>.

For local producers it is best to select vegetables and fruits that can be grown to a high-quality in your area. Quality is essential.

### **PROFITABILITY**

Starting a nursery business is very capital intensive. Most nurseries have a minimum of two acres and run up to 100+ acres, with an average of 55 acres of land being required for a successful operation. Other overhead expenses include plant stock, irrigation systems, heating/cooling systems, greenhouses, nutrients and growing medium/soil amendments, business licensing, labor, labor tax responsibilities, insurances, marketing/advertising, post harvest facilities, packaging costs and transportation.

The wholesale and retail nursery business is very competitive. Publications, as well as discussions with managers of nursery operations, indicate that it would be an uphill battle for a new, small nursery to compete with the established giants in the industry such as Color Spot Nursery, Star Nursery, Wal-Mart, Lowes and Home Depot. Many of the large nurseries and outlets are connected with each other through ownership or agreements. The size, experience level and connections of the major nurseries make it very difficult to compete with any plant products that they offer. Many small, well-established nurseries are struggling to remain viable. A new, small-scale nursery would likely fail

unless it offers products that are unique or that have a location advantage. This could be different plants offered or an approach of offering a service, such as area adapted plants or native plants. Large trees that are adapted to the area have a location advantage.

The profitability of production for these markets is unknown for western desert areas. A study will start in 2008 to examine production systems and their profitability in desert regions by Holly Gatzke, Kynda Curtis and Jay Paxson of University of Nevada Cooperative Extension. Several publications have discussed systems and costs of production for these crops in moist climates and are available at the Lincoln County Cooperative Extension office:

- Barton, 2002
- GardenWeb, 2006
- Gill et.al., 1994
- Hodges et.al., 1998.
- Ingram et.al. 2000.
- Robbins et.al., 2004; 2006
- Sellmer et.al. 1994

### SERVICING THE TARGET MARKET

The target market is largely comprised of baby boomers and upper-income/double income families. The majority of residents in the new communities will have minimum household incomes of \$55,000 per year and most will be much higher. The customers for business opportunities in the new southern Lincoln County developments are likely to be active individuals who enjoy a sense of open space, community and a healthy lifestyle. They are active and busy, but want a beautiful environment and are willing to pay for it. To win these customers, the product must provide a bargain with exceptional quality and service. These consumers make sure their purchases are reasonably priced. When it comes to food, quality is the top priority. Baby boomers enjoy great customer

service that saves time, money and aggravation (Gatzke, 2007).

When establishing a business you may develop a wholesale business that sells product to nurseries, restaurants or food stores in which case quality will be your major concern. You may also set up a farm-direct business to sell directly to the customer in a nursery, farmers market or food stand. In this case you must have quality product and provide exceptional customer service and experience. One of the nursery managers interviewed described several successful "destination nurseries." A destination nursery is a nursery established for retail sales and is set up as an attraction. In addition to the plants for sale, decorative displays using the plants and creative hardscape form a park-like environment to be enjoyed by customers. Many destination nurseries become a recreation site for locals and a tourist attraction for travelers offering value-added products, (jams/jellies, juices, baked goods, etc. using local produce) and local crafts for sale that supplement the income of plant sales.

### CONTACTS

Carl Rygg	Coyote Springs
Doug Carriger	Investment <a href="http://www.coyotesprings.com">www.coyotesprings.com</a>
Jim Rizzi	Pardee Homes <a href="http://www.pardeehomes.com">www.pardeehomes.com</a>
Mike Browning	Anderson Baron (Landscape Architect)
Matt Davis	Olympia Companies (developer at LCLA)
Brent Ramenofsky	BLT (developer at LCLA)
Mr. Ian, manager	Star Nursery, Las Vegas, Nev.
Kevin Potts	CCSN Desert Garden Center, Las Vegas, Nev.
Robert Dannyberger, owner	Commercial/wholesale tree grower, Las Vegas & Sandy Valley, Nev.
Jerry Halamuda	Color Spot Nurseries, Inc; wholesale

	distributor
Plant World Nursery	Las Vegas, Nev.
Moon Valley Nursery	Las Vegas, Nev.
Dan McClure	Wholesale Nurseries
Kelly Zeh	Zehco, Inc. Distributor to retail outlets & landscaping companies, Las Vegas, Nev.
James Gatzke	USDA, Natural Resources Conservation Services, Caliente, Nev.

**REFERENCES:**

Barton, S (Ed). 2002. Establishing and operating a garden center. Natural Resource, Agriculture and Engineering Service. Cooperative Extension. Ithaca New York.

Crossen, Cynthia. 2006. A Purple Petunia, (The story of a "destination nursery.") The Wall Street Journal Online.

Food Market Research. 2007.  
<http://www.marketresearch.com>

Food Network. 2007.  
<http://www.foodnetwork.com>

Form number NDANP-100. 2006. Application for Nursery Stock Dealer License. Nevada Department of Agriculture, Division of Plant Industry.

GardenWeb. 2006. How Profitable is a Backyard Nursery? (Open forum of small-scale nursery operators).  
<http://forum.gardenweb.com>

Gatzke, H. 2007. Profile of customers in southern Lincoln County. University Of Nevada Cooperative Extension Fact Sheet. Pending.

Gill, Stanton and Ross, David and Hanson, James. 1994. Starting a Nursery

Enterprise: Introduction and Regulations. University of Maryland, College of Agriculture & Natural Resources.

Hodges, Alan W. and Satterthwaite, Loretta N. and Haydu, John J. 1998. Business Analysis of Ornamental Plant Nurseries in Florida. University of Florida IFAS Extension.

Ingram, D.L. and Midcap, J.T. and Gunter, D.L. 1980 and rev. 2000. Starting a Nursery Business. University of Florida Extension.

Robbins, James A. and Klingman, Gerald L. 2004. Starting a Wholesale Nursery – Part I. University of Arkansas, Division of Agriculture.

Robbins, James A. and Klingman, Gerald L. 2006. Starting a Wholesale Nursery – Part II. University of Arkansas, Division of Agriculture.

Sellmer, James C. and Dana, Michael N. 1994. Starting in the Nursery Business. Purdue University Cooperative Extension Service, Dept. of Commercial Horticulture.

Slowfood. 2007.  
<http://www.slowfoodusa.org/>

Specialty Food. 2007.  
<http://specialtyfood.com>

The Chef's Garden. 2007.  
<http://www.chefs-garden.com>

USDA Natural Resources Conservation Service. 2007. Plants Database.  
<http://plants.usda.gov>