

# The State of the Alaska Peony Industry 2012

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AFES Miscellaneous Publication 2013-03

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Cv. Duchess de Nemours in bloom. This was the most commonly grown double white cultivar in Alaska.



## Introduction

Tracking the growth and development of a new industry is critical to the assessment of its success. Growers, industry support groups, government leaders, educational and research organizations and more use basic statistics on crop production, markets, and growth over time to support and fund activities that promote this industry. Annual statistics also provide an indicator of industry health and can be used to develop models of long-term trends in industry growth. Beginning in 2011, the University of Alaska Fairbanks Agricultural and Forestry Experiment Station began compiling industry statistics. We summarize confidential grower information to provide baseline data that the industry can use to obtain funding, make business decisions, and promote their industry.

## Methods

A survey was designed by growers in the peony industry and members of the Alaska Peony Growers Association. Data included the following:

1. Number of roots in the ground including historic data from previous years, current year and future planting plans;

2. The name of cultivars planted and the number of roots in the field for each cultivar;
3. Total fresh cut stems harvested and sold to state, national, and international markets;
4. Sales and price range for cut stems by buyer; and
5. Percent sales by buyers (florist, wholesale brokers, etc.).

Surveys were sent to growers statewide in mid July, and results were compiled and tabulated after the final harvest in October.

## Roots Planted

Planting for commercial production began in 2004 with small test plots in Fairbanks, Kenai, and Homer (Figure 1). By 2012, more than 120,000 roots were planted by the 38 survey respondents. Individual fields ranged from 18 plants to nearly 14,000 plants. The number of roots in the ground more than tripled since 2011. Based on an industry estimate for average yield of 10 stems per plant (varies with location, cultivar, weather), projected statewide harvest by 2015 is 1,200,000 fresh cut peony stems.

'Sarah Bernhardt' peonies, the most planted and shown to be the most consistently productive and vigorous cultivar tried by Alaska peony growers.



## Cultivars

The most frequently planted cultivar was 'Sarah Bernhardt' (Fig 2). It has been shown to be the most consistently productive and vigorous plant of all colors. 'Duchess de Nemours' was the most common double white cultivar, although growers are looking for a better white that shows no shades of pink, blush, or streaks of red. A total of 86 cultivars was planted by all respondents, many of them trial plants, to learn which cultivars grow best in Alaska's various climates (Table 1). A large number of roots was planted for which the cultivar was not specified (other category). The responding growers estimated they would be planting 38,500 peony roots in 2013.

## Fresh Cut Peony Sales

Growers indicated the most commonly sold cultivars were 'Sarah Bernhardt', 'Duchess de Nemours', 'Dr. Alexander Fleming', 'Avalanche', and 'Mons' Jules Elie'. More than 25,000 fresh cut peony stems were sold in 2012 (Fig 3). Sales of fresh cut peony stems more than doubled in 2012 from 2011 records. Sales to other states in the US dominated the markets, and a small quantity was shipped internationally to Canada and Taiwan. The Taiwan sales were a test market by one grower to establish export protocols and identify the most economical shipping options.

Twenty-eight of the 38 growers who completed the survey did not harvest stems in 2012. It takes three to five years after planting to attain harvestable yields. Ten growers reported commercial sales of fresh cut peonies (Table 2). More than half of the sales were to Alaska pack houses and direct sales to consumers. Prices ranged from \$2.00 to \$10.00 per stem depending on the buyer. The highest average price was from sales to florists.

The cultivar Dr. Alexander Fleming, right.

## Cumulative Number of Roots in the Ground

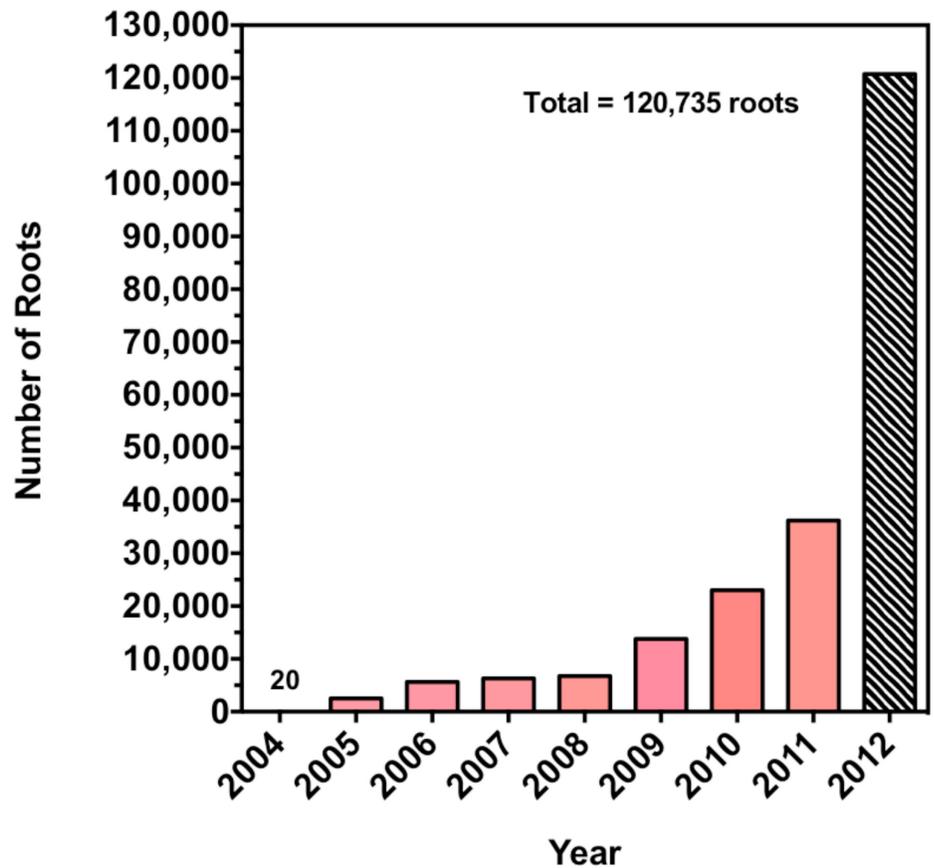


Figure 1. Cumulative number of roots planted by Alaska peony growers. In 2012, number of growers (n) reporting was 38.



## Grower Comments on the 2012 Season

The growing season in coastal and southcentral Alaska was wet and cool. In Homer, along with being rainy for long periods, three violent wind storms in September damaged some plants. Farms on the bluff were especially hard hit. Because of the cool conditions, some cultivars were still being harvested into early October. Fairbanks, Central, and Delta Junction area growers reported cool but good weather conditions and a growing season with no major issues such as frost or hail. Low-lying areas in Willow and Wasilla reported severe late-season flooding after days of torrential rain. Growers with raised beds in these areas indicated the plants appeared healthy going into winter. Fall planting was delayed because of flooded fields in some areas. Growers in coastal areas are considering use of high tunnels to keep rainwater off of foliage to reduce *Botrytis* gray mold disease.

Major issues for peony growers included access to hard-working, affordable field labor; *Botrytis* gray mold; and severe thrips damage, especially to white-flowered cultivars at some locations. Growers in Palmer and Kenai reported a severe disorder that has not been identified as a known disease on peonies. Guesses include an abiotic cause such as chemical or fertilizer toxicity. Analyses of the foliage have repeatedly shown no fungal or bacterial cause. Growers in Fairbanks reported serious problems with perennial grasses that reinforce the need for clean cultivation prior to planting

Top cultivars by root number

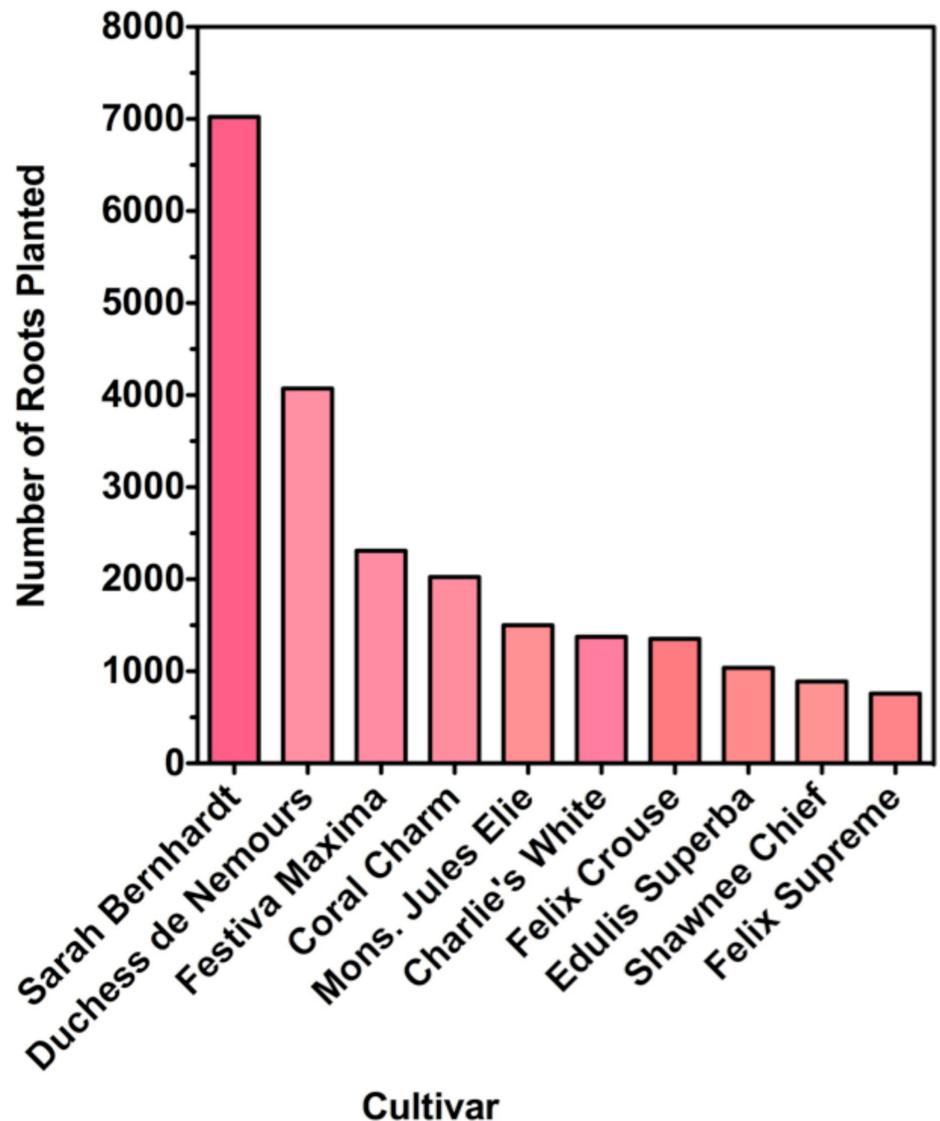


Figure 2. The most frequently planted peony cultivars by Alaska peony growers (n=38 respondents).

Mixed peonies in the cultivar trial beds at the Georgeon Botanical Garden. SNRAS has conducted variety trials, marketing studies, and surveys from 2001 to the present on the potential for a peony industry in the state; it is clear that there is a niche market for their ornamental value, and that peonies can grow here. Other research into their market potential, such as for their medicinal value, is just beginning.



Cultivar	# Planted
Other	23,394
Sarah Bernhardt	19,173
Duchess de Nemours	16,725
Festiva Maxima	10,070
Mons. Jules Elie	4,961
Charlie's White	4,681
Dr. Alexander Fleming	4,584
Red Charm	4,230
Coral Charm	2,662
Felix Crouse	2,583
Felix Supreme	2,446
Bowl of Cream	2,287
Edulis Superba	1,610
Pink Hawaiian Coral	1,491
Shirley Temple	1,315
Elsa Sass	1,305
Victorie a la Marne	1,174
Marie Lemoine	1,153
Avalanche	1,065
Kansas	1,054
Karl Rosenfield	938
Edulis Supreme	890
Shawnee Chief	851
General McMahan	831
Grover Cleveland	779
Coral Sunset	674
Adolphe Rousseau	555
Alba Plena	545
Ann Cousins	450
Walter Faxon	424
Nick Shaylor	422
Dr. F.G. Brethour	364
My Love	349
Duchess D'Orleans	300
Mother's Choice	291
Mons Martin Cahuzac	255
Lancaster Improved	250
Henry Bocstoce	224
Hermione	223
Emmaculate	210
Myrtle Gentry	201
Bowl of Beauty	200
Lilian Wild	200
Buckeye Belle	140

Frosted Rose	130
Red Magic	130
Rubra Plena	124
Baroness Schroeder	116
Brand's Magnificent	114
F.D. Roosevelt	114
Inspecteur Laverne	114
President Roosevelt	100
Miss America	93
Avis Varner	60
Bridal Icing	60
Kelways Glorious	60
La Lorraine	60
Leslie Pick	50
Sword Dance	50
Blush	48
Angel Cheeks	44
Diana Parks	44
Eden's Temptation	44
Fringed Ivory	44
Henry Bockstoce	44
Lady Alexandra Duff	44
Mary Nichols	44
Moon River	44
Mr. Ed	44
Paula Fay	44
Princess Bride	44
Rosea Plena	44
White Ivory	43
Bartzella	30
Sweet Marjorie	29
Katie Kennicott	28
Moonstone	25
Richard Carvel	25
President Taft	25
Nancy Nicholls	22
Garden Treasure	11
Old Faithful	11
Primavera	2
Sorbet	2
Amalia Olson	1
Gardenia	1
<b>Total Number Roots</b>	<b>120,735</b>

Table 1. Peony cultivars planted throughout Alaska by 38 survey respondents listed in order of quantity planted. Many are trial cultivars so growers can determine which work best at assorted Alaska sites.

Sarah Bernhardt was the top planted and sold cultivar. ("Other" is a category where the respondent did not indicate the cultivar grown.)

## Fresh Cut Peony Stem Sales by Destination

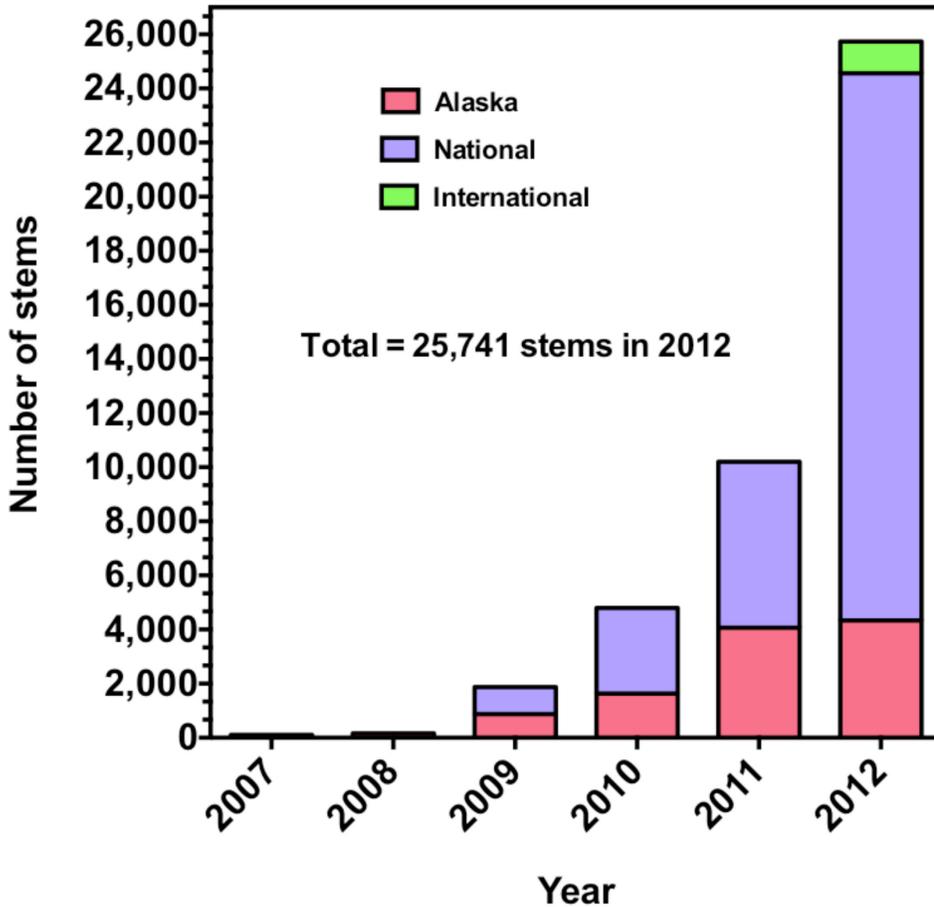


Figure 3. Total number of fresh cut peonies sold to Alaska, national, and international buyers since 2007. Ten Alaska peony growers sold flowers in 2012.

and complete elimination of perennial grasses. Two farms also reported moose damage to roots by trampling. Also baby moose occasionally pull up a new, barely-rooted plant, but damage is not extensive. A major concern identified by many growers is the need for cut flower harvest standards, product quality control, and shipping standards to maintain product quality especially for flowers being shipped in midsummer.

## Summary

Peonies have been grown for commercial production in Alaska for nine years; the 2011 season marked the beginning of measurable sales to markets outside Alaska. In 2012, the first foreign exports were reported although most sales were still experimental in nature. The industry continues in an experimental stage as growers from around the state clear land, replace vegetable and other field crops with peonies, and struggle with lack of information on soils, fertilizers, disease issues, and more. Growers reported brisk sales with little or no inventory remaining at the end of the season. The buyers range from direct sales to consumers to large wholesale distributors. Prices fluctuate widely depending on the buyer. Despite a mountain of issues each grower is facing as they adapt techniques to a disparate state, more than 25,000 cut flowers were sold to domestic and international markets in 2013.



Frank Borman standing in his peony field outside Fairbanks. He began planting the roots in 2009 and reaping a very few salable blooms in 2010, but the process was very slow. Borman is a longtime Delta farmer and has grown a variety of crops over the years. He has a u-pick vegetable and strawberry operation as well as peonies. He sells through Polar Peonies, a pack house.

Table 2. Buyers of Alaska fresh cut peonies by percentage of sale by individual growers and price ranges per stem.

Table 2. Buyers	Percent of Sales by individual growers (range)	Percent of Sales (average)	Price per Stem (range)	Price per Stem (average)
Pack House (buys direct from grower, packs and ships to a variety of buyers)	0 - 100%	37.0 + 49.1%	\$2.00 - 3.50	\$2.75 + 1.06
Direct Sales (brides, ad agencies, tourists, farmers' markets)	0 - 100%	30.0 + 38.5%	\$3.00 - 10.00	\$5.12 + 1.01
Wholesale Houses (buy in bulk and sell to florists, other wholesalers, may sell to public but at different price)	0 - 70%	16.3 + 29.7%	\$4.00 - 4.50	\$4.17 + 0.29
Florists (direct to flower shops that sell to consumers)	0 - 50%	12.0 + 19.5%	\$4.50 - 6.00	\$5.82 + 0.88
Floral Distributors (has own flower shop and sells extras to others in area)	0 - 20%	3.0 + 6.6%	\$4.00 - 5.00	\$4.50 + 0.70
Event Planner	0 - 30%	2.3 + 10.0%	\$4.00 - 5.00	\$4.50 + 0.08
Broker (buy in bulk and will sell to regional wholesale houses)	0 - 12%	1.2 + 3.9%	\$2.00 - 4.00	\$3.00 + 0.70

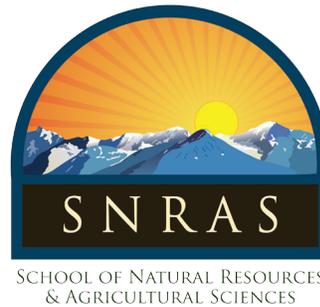
An example of a thrips infestation. This is an old, spent bloom left on the plant. This farm is surrounded by lush natural vegetation and the farm is organic. Although cleanliness is important domestically, buds will be rejected totally for export markets if there is any sign of infestation. Several growers want to move into foreign markets, and they need to know measures to minimize population growth and how to clean up buds that have thrips.





'Coral Charm' peony, one of the top five most frequently planted cultivars in Alaska by commercial growers.

Example of the unknown, probably abiotic disorder affecting some peonies at farms in Palmer and Kenai. Guesses as to the culprits are chemical or fertilizer toxicity.



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'Charlie's White' peony, a popular white cultivar.

