Herb Evaluations 2006

AFES Variety Trial 2007-03 February 2007

by The Herb Bunch Volunteers

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Heirloom Garden

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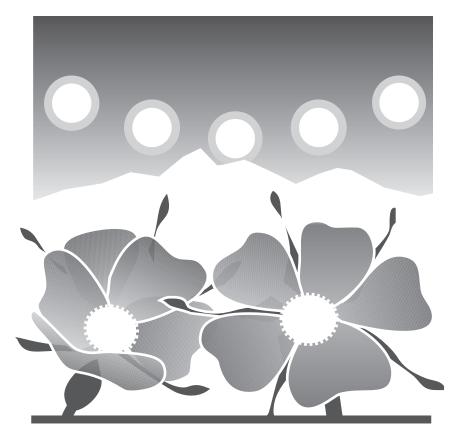
Agricultural and Forestry Experiment Station

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GEORGESON BOTANICAL GARDEN



Introduction

The **Dorothy Truran Herb Garden** at the Georgeson Botanical Garden was created in 1999 to display herbs with a variety of uses, to evaluate Alaska native herbs and their potential for cultivation, to identify the usefulness of new herbs and cultivars for Alaska gardens, and to evaluate the hardiness of perennial herbs. The Truran Herb Garden has been planted and cared for by the community volunteer group, the Herb Bunch, since 2003. It consists of six permanent raised-bed gardens that were initially constructed in 1999. Soils are Fairbanks silt loam amended with composted garden soil. Beds are surrounded by stone borders a minimum of 12 in (30.5 cm) high.

Soils were fertilized with 3 lbs per 100 ft² (147g per m²) 10-20-20S on 2 June. All amendments were broadcast spread. If the area was not planted yet, amendments were tilled into the top 6 inches using a mini-tiller. Beds were planted between 7 June, except the perennial beds to which plants have been added throughout the season since 2001.

All cultivars and species were planted in unreplicated beds according to recommended commercial spacings or design specifications. Plant numbers varied according to plot size and design. Summer maintenance consisted of hand weeding and

pruning plus overhead irrigation as needed. Plot evaluations occurred once during the third week of August and included height, spread, flower and foliage color, presence of disease and insect pests, winter survival of perennials, and overall subjective comments on growth, usefulness as a culinary or medicinal herb, and ornamental appeal.

Weather data were compiled annually from a U.S. Weather Service station, elevation 475 ft (145 m), located approximately 350 ft (107 m) west of the garden. The summer was an average growing season when comparing summary statistics, but it was anything but ordinary (Tables 1 and 2). A hard freeze and blizzard on 4 - 5 June caused significant damage to tender annuals, however, the herb garden had not been planted yet, The official temperature at the weather station reached 30°F, but temperatures at plant level in the plots was 25°F. The total thaw degree days showed an average summer only because September was warm and frost was not recorded until the end of the month. Most of the monthly averages were lower than the previous two years. Rainfall was similar to previous years, but much of July and August were overcast (Table 2). In July, there were 22 continuous days of measurable precipitation.

Table 1. Weather data from	the U.S.	Weathe	Service	station	located	just we	st of the	garden	for yea	rs 1996	- 2006.
Season	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Average temperature: (°F)											
May	44	48	49	46	44	45	50	44	52	56	50
June	57	61	58	61	59	57	58	61	66	67	59
July	62	64	62	61	59	61	61	61	65	63	62
Aug	52	57	52	58	52	57	54	55	62	58	55
Sep	41	50	46	45	41	49	47	41	38	46	50
Maximum temperature (°F)	82	87	87	91	83	95	85	82	90	85	80
Growing season:											
Last frost	June 5	May 25	May 13	May 29	May 15	May 13	May 12	May 24	May 8	May 5	June 4
First frost	Aug 27	Aug 19	Sep 13	Sep 11	Sep 16	Sep 24	Sep 2	Sep 13	Sep 4	Sep 2	Sep 25
Frost free days	83	86	123	105	124	134	113	112	119	120	112
Thaw degree days*	2811	3656	3278	3383	2943	3439	2980	3123	3751	3767	3523
Rainfall (inches)	8.73	5.86	9.87	8.66	8.55	5.80	9.35	9.91	5.6	10.59	7.86
Previous winter season:											
Minimum temperature (°F)	-48	-54	-48	-54	-50	-27	-36	-35	-45	-50	-49
Snowfall (inches)	47.8	38.4	30.6	31.6	62.2	39.9	39.7	33.2	51.7	70.9	51.8

Table 2. Weather data summaries for growing season years 2004 - 2006.															
		May			June		July			August			September		
Temperature °F	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006
Average daily maximum	64	68	63	80	73	69	76	74	71	75	69	65	47	54	61
Monthly high	76	77	75	90	84	80	89	81	83	84	85	72	61	66	69
Average daily minimum	40	43	38	53	50	48	53	51	52	49	46	45	30	38	38
Monthly low	30	31	27	42	43	30	44	39	46	35	33	36	26	28	29
Rainfall (inches)	1.67	1.66	0.20	0.42	2.97	1.15	1.21	4.09	3.42	0.50	0.39	2.48	1.26	1.48	0.61

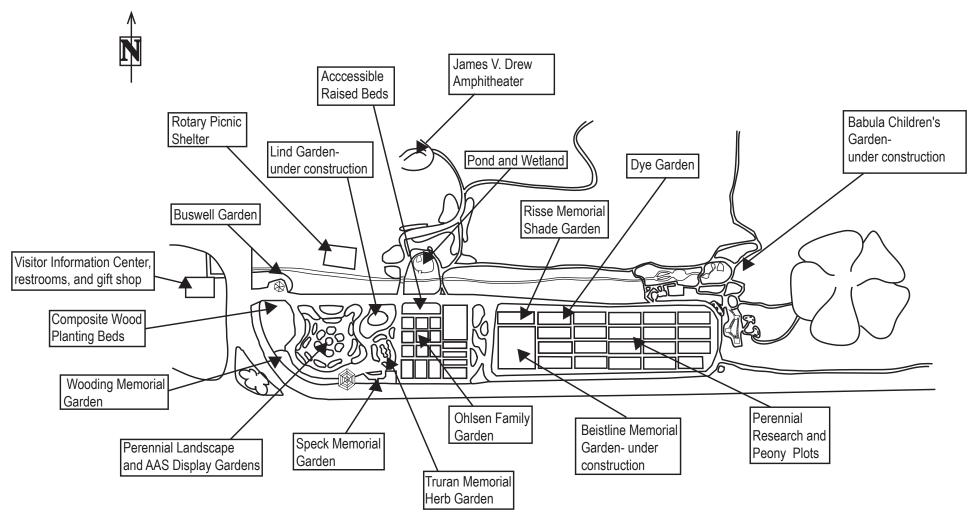


Table 3: Annual and perennial herbs and edible flowers

location	common name	culivar	first harvest	flower color	foliage color	vegetative height inches	vegetative spread inches	flower height inches	flavor rating	aroma rating	produc- tivity rating
BBB	Butterfly weed	Gay Butterflies									
BBB	Germander, Cat			fuchia	gray green	8	9	8			
BBB	Germander, Dwarf	Prostratum		orchid	lime green	8	13				
BBB	Germander, Silver			fuchia	blue green	9	24				
BBB	Joe-Pye Weed	Little Joe		pomegranate	olive green	37	13	37			
BBB	Showy Butterfly weed				grass green	16	20				
BBB	Silver Butterfly Bush				forest green	32	50		0	0	
BBB	Tatarian honeysuckle				forest reen	32	30		0	0	
BBB	Wedded Honeysuckle				forest green	22	10		0	0	
edible flower	Broccoli	Small Miracle		loden green	loden green	13	37				
edible flower	Calendula	Bon Bon Bright Yellow		purple	dark green	19	7				
edible flower	Marigold, signet	tangerine gem				13	13				
edible flower	Nasturtium	Alaska Mix		orange, yellow	lime green, grass green	16	31				
Heirloom	Chervil	Flat Leaf	none		pale yellow green	17	5		3	3	1
Heirloom	Dill	Mammoth		yellow	green	42	22		3	3	3
Heirloom	Endive	Tres Fin Marchiere Frissee			dark green grass	22	15		0	3	3
Heirloom	Garden Cress				deep moss green	1	20		2	3	3
Heirloom	Horehound				gray green	20	19				
Heirloom	Horseradish				turf green	20	24				
Heirloom	Lettuce	Forellenschuss	5-Jul		red speckled green	15	15		0	3	3
Heirloom	Lettuce, Butterhead	Bibb Slow Bolting	5-Jul		jade green						

common name (continued)	winter survival rating for perennials, frost tolerance for annuals	Overall rating	comments
Butterfly weed			did not survive
Germander, Cat			E
Germander, Dwarf			slow growing
Germander, Silver			slow growing
Joe-Pye Weed			vigorous growth
Showy Butterfly weed			slow
Silver Butterfly Bush			very vigorous
Tatarian honeysuckle			1000% from container size
Wedded Honeysuckle			500% growth since planted
Broccoli			
Calendula			
Marigold, signet			
Nasturtium			
Chervil			voles ate 2 plants and stunted the last one, minimal growth, not healthy
Dill		3	went to flower early so left for seeds
Endive		3	cut back several times beginning in early July to prevent bolting
Garden Cress		2	
Horehound			
Horseradish			
Lettuce		3	Beautiful plant- slow to bolt, voles attacked centers of stems of 3 plants
Lettuce, Butterhead			bolted early, cut back extensively starting in early July

Table 3: Annual and perennial herbs and edible flowers, cont.

	-											
location	common name	culivar	first harvest	flower color	foliage color	vegetative height inches	vegetative spread inches	flower height inches	flavor rating	aroma rating	produc- tivity rating	
Heirloom	Lettuce, Butterhead	Four Seasons	5-Jul		bright green w/ red leaf tips	15	15		0	3	3	
Heirloom	Lettuce, Leaf	Black Seeded Simpson	5-Jul		lime green	34	13		0	3	3	
Heirloom	Lettuce, Leaf	Green Deer Tongue	5-Jul		turf green	22	19		0	3	3	
Heirloom	Lettuce, Leaf	Red Sails	5-Jul		bronze red	15	17		0	4	4	
Heirloom	Lettuce, Romaine	Cimmaron Red	5-Jul		burgundy	22	21		0	3	3	
Heirloom	Miner's lettuce		5-Jul		light green	10	17		0	2		
Heirloom	Parsley	Hamburg Rooted			moss green	16	20		2	2	4	
Heirloom	Parsley, Italian				moss green	23	23		4	4	4	
Heirloom	Parsley, Moss Curled				grass green	16	16					
Heirloom	Peppermint											
Heirloom	Rosemary				gray green	14	7		3	3	1	
Heirloom	Sage	Broad Leaf			sage green	14	29		3	3	3	
heirloom	scarlet runner bean			orange	yellow green	12	18					
Heirloom	Spearmint											
Heirloom	Summer Savory			lavender	moss green	17.5	14		2	3	3	
Heirloom	Sweet Marjoram				olive gray green	12	7		3	3	3	
Heirloom	Thyme	Broad Leaved			moss green	9	7		3	4	3	
Perennial	Onion, Flat-leaved			white	medium green	0	0	0				
Perennial	Saskatoon	Martin		white	dark green	115	93			0	0	
Perennials	Angelica		none	yellow green	medium green	5	5		1	1	1	
Perennials	Bergamont				medium green	0	0	0				
Perennials	Black Currant	Erkheikki VII	none	yellow green	dark green	59	144			0	0	
Perennials	Black Currant	Melalathi	25-Aug	yellow green	dark green	41	117			4	2	

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common name (continued)	winter survival rating for perennials, frost tolerance for annuals	Overall rating	comments
Lettuce, Butterhead		3	one chewed in center and one rotted
Lettuce, Leaf			prolific and voles left alone
Lettuce, Leaf		3	did not bolt
Lettuce, Leaf		4	very slow to bolt, very productive large leaves, beautiful and tastes good
Lettuce, Romaine		3	slow to bolt
Miner's lettuce			flowering when planted, voles favorite, barely one plant left
Parsley		3	
Parsley, Italian		4	
Parsley, Moss Curled			
Peppermint			died July 30, unknown cause
Rosemary		2	growth stunted by parsley
Sage		3	
scarlet runner bean			
Spearmint			died
Summer Savory		3	
Sweet Marjoram		3	
Thyme		3	
Onion, Flat-leaved	0		Flat leaves look like daffodil. Mild flavor. Attracts insect pollinators. Flowers late, so no viable seeds produced. Ornamental as well as edible.
Saskatoon	4	2	Largest fruit of all saskatoons tested; juicy, sweet, chewy seeds. Very ornamental white flowers in spring
Angelica	2		Biennial. Large, thick, impressive stems with huge flower heads and coarse foliage. Needs staking in second season. Unknown insect eating leaves.
Bergamont	0		Spreading growth from 6 inches to 24 inches. Did not bloom this season.
Black Currant	4	2	Vigorous growth, spreads widely, poor fruit productivity this season compared to other black currants.
Black Currant	4	3	Vigorous growth with recumbent branches. Fruit hangs beneath the leaves near the ground. Strong smell to leaves and fruit. Excellent productivity.

rating: 1-4 with 4 being the best

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Table 3: Annual and perennial herbs and edible flowers, cont.

location	common name	culivar	first harvest	flower color	foliage color	vegetative height inches	vegetative spread inches	flower height inches	flavor rating	aroma rating	produc- tivity rating	
Perennials	Black Currant	Nikkala XI	none	blue green	dark green	34	95			0	0	
Perennials	Chinese Garlic Chives			pinkish white	dark green	28	64	39	3	3	4	
Perennials	Chives	Grande	none	light purple	medium green	13	96	13.5	3	4	3.5	
Perennials	Chocolate Lily		none	purplish brown	medium green	0	0	0				
Perennials	Cicely, Sweet		12-Aug		medium green	6	14			3	3	
Perennials	Costmary		none	white	medium green	0	0	0			4	
Perennials	Egyptian Walking Onion	Proliferum Group			light green	0	0	0				
Perennials	Germander			purple	medium green	0	0	0				
Perennials	Green's Mountain Ash				medium green	59.5	45				4	
Perennials	Kinnikinnick				dark green	6	69				3	
Perennials	Labrador Tea			white	medium green	14		25	2	3	2	
Perennials	Lingonberry	Gilmore				0	0	0				
Perennials	Lovage	Magnus	12-Aug		medium green	33	44		0	2	3	
Perennials	Mint, Chocolate			light purple	dark green	23	27	23	2	2	3	
Perennials	Mint, Ginger	Variegata		purple	variegated green/yellow	9.5	25	9.5	4	4	4	
Perennials	Nettle, Stinging	Max			dark green	19	44				3	
Perennials	Northern Bedstraw			white	dark green	19	44	19	2		4	
Perennials	Onion, Altai			white	dark green	24	74	24	3	3	4	
Perennials	Onion, Welsh	Gribovski		white	dark green	30	71	32	3	3	4	
Perennials	Parsley	Hamburg Rooted				0	0					
Perennials	Roseroot			yellow	light green	8	24	8	1		3+	
Perennials	Saskatoon	Smoky	30-Jul	white	dark green	113	88			1	1	

common name (continued)	winter survival rating for perennials, frost tolerance for annuals	Overall rating	comments
Black Currant	4	2	Spreading branches covered with large black fruit. Very productive. Strong flavor
Chinese Garlic Chives	4	4	Flat-leaved plants with hint of garlic; used like chives. Very productive, spreads well, also use as ornamental.
Chives	4	3.5	Extra large leaves, mild flavor, very productive, spreads vegetatively as well as by self seeding
Chocolate Lily	0		Blooms early with aromatic flowers. Edible bulbs were not harvested. Plants produced at least two stems. Plants die back by late August.
Cicely, Sweet	3	3	Early to emerge in spring. Excellent vegetative growth with sweet, slightly anise-scented leaves and stems. Very productive.
Costmary	0		Amazing spread of one-year-old plants. Strap-shaped leaves crowded in large clumps. Sweet scent. Used in teas, herb pillows, beverages and salads.
Egyptian Walking Onion	0		Very large bulbs and excellent production of aerial bulbs.
Germander	0		no show in 2006
Green's Mountain Ash	4	4	Excellent vegetative growth in second year after planting. Some branching, but most growth was in height.
Kinnikinnick	4	3	
Labrador Tea	2	2.5	Sparsely-leaved bush that flowered in mid to late May. Well established in second year.
Lingonberry	0	0	Single plant died in first winter.
Lovage	3	2	Four transplanted to south side of bed. Drooping stalks.
Mint, Chocolate	0	2	
Mint, Ginger	0	4	Very productive. Plants grown in plastic tubs to confine spread.
Nettle, Stinging	3	3	Max spread is for 6 plants. Plants grew very bushy and tall despite being crowded by shrubs. This species is native to coastal Alaska and is used in teas and medicines.
Northern Bedstraw	4	3	Native bedstraw, spreading by rhizomes. Very fragrant. Used as medicinal plant and for potpourri.
Onion, Altai	4	3	Large, round edible stems, biting flavor. Attracts many pollinators.
Onion, Welsh	4	3+	Large, round stems. biting flavor. Excellent growth from crown.
Parsley	0		Roots decimated by voles. No harvest.
Roseroot	4	3	Native plant with edible roots and medicinal properties. Also used as ornamental in rock gardens.
Saskatoon	4	2	Small fruit, not as productive as Martin.

rating: 1-4 with 4 being the best

Table 3: Annual and perennial herbs and edible flowers, cont.

	location	common name	culivar	first harvest	flower color	foliage color	vegetative height inches	vegetative spread inches	flower height inches	flavor rating	aroma rating	produc- tivity rating	
	Perennials	Silver Mound Artemisia	Nana										
10	Perennials	Sorrel	Blonde de Lyon			medium green	22	54			3	4	
	Perennials	Sorrel, Profusion	TM683			dark green							
	Perennials	Stinkweed				silver green	9	15		2	3	4	
	Perennials	Sweet Woodruff			white	light green							
	Perennials	Tarragon	Russian			medium green	42	68		0	1	4	
	Perennials	Tarragon, French		4-Sep		dark green	15	28		3	2+	3	
	Perennials	Wild Alpine Strawberry				medium green	6	30			0	0	
	Perennials	Wild Potato	Alaska wildflower		pink	medium green	3	14				3	
	Perennials	Yarrow	Cerise Queen		red/pink	yellow green	29	27	29	2	2	3	
	Perennials	Yarrow, Mace			white	light green							
	Lavender	Lavender	Munstead Dwarf		lilac to blue lilac		14	10	20		4		
	Lavender	Lavender	Spanish		burgandy	blue green	13	12	22		2		
	Lavender	Lavender	Provence Blue		dusty blue	blue green	10	7	23		2		
	Lavender	Lavender	Lavender Lady		purple	green	10	9	18		2		
	Lavender	Lavender	Hidcote Blue		purple		11	12	22		4		

common name (continued)	winter survival rating for perennials, frost tolerance for annuals	Overall rating	comments	
Silver Mound Artemisia	0		Compact, rounded mound of silvery foliage, neat appearance, overwintered well	
Sorrel	0	3	Popular sorrel grown for soups. Excellent flavor of young leaves. May be harvested very early as soon as shoots emerge.	11
Sorrel, Profusion	0		Abundant tender, slightly acid leaves all summer, recovers well after cutting. May be harvested early in spring as soon as leaves expand.	
Stinkweed	4	3	Seedlings planted in mid summer, good growth and establishment in first year. Leaves used in traditional Alaska medicines.	
Sweet Woodruff	0		Low creeping perennial, spreads slowly from rhizomes. Sparse coverage.	
Tarragon	4	3	Poor flavor compared to French Tarragon.	
Tarragon, French	3	3	Bushy perennial with oblong toothed leaves. Very productive. The tarragon of choice for cooking.	
Wild Alpine Strawberry	3	2		
Wild Potato	4	3	Plants affected by unknown disease. Leaves are mottled and yellow. No similar symptoms in native roadside plants. Very few flowers.	
Yarrow	0	2		
Yarrow, Mace	0		Nice bushy growth this second season. Some flowers. Not harvested.	
Lavender			didn't fill in as well as others	
Lavender			did not look as healthy or developed when transplanted into the garden, but by the end of the season they were all blooming well. The fragrance was lighter than the other lavenders, but not unpleasant. One description was "light bath salts". Blooms could be described as burgundy-colored cone-shaped bracts with a few pink petals looking like rabbit ears coming from the top.	
Lavender			Not as good a bloomer as the other varieties planted, probably because it blooms later, and our growing season is too short. Smaller flowers on strong straight stems, shorter foliage.	
Lavender			The flower color was the darkest of the five varieties (more towards purple) and had the smallest flower blooms. The leaves are shorter and more green compared to the other varieties. This was most prolific bloomer in this bed. Fragrance is not as faint as the Blue Provence but not as pronounced as the Munstead or Hidcote.	1
Lavender			Buds are a purple color that loses intensity as they bloom out. Similar foliage to Provence, but less dense. Slightly longer stems between nodes. The fragrance was described as sweet and slightly minty. This is a definite favorite.	
				_

rating: 1-4 with 4 being the best www.uaf.edu/snras/gbg/

Scientific Names of Herbs in the Trial Garden

Perennial Herbs:

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Angelica - Angelica archangelica

Artemisia 'Silver Mound' - Artemisia schmidtiana

Bedstraw, Northern - Galium boreale

Bergamot, Wild - Monarda fistulosa

Chives - Allium schoenoprasum

Chives, Chinese Garlic - Allium tuberosum

Chives, Garlic - Allium tuberosum

Chocolate Lily - Fritillaria camschatcensis

Cicely, Sweet - Myrrhis odorata

Costmary - Chrysanthemum balsamita

Currant, Black - Ribes nigrum

Germander - Teucrium chamaedrys

Gooseberry, Red - Ribes grossularia

Kinnikinnick - Arctostaphylos uva-ursi

Labrador Tea, - Ledum groenlandicum

Lingonberry - Vaccinium vitis-idaea ssp. minus

Lovage - Levisticum officinalis

Mint, Chocolate - Mentha x piperita var. piperita

Mint, Ginger - Mentha arvensis

Mountain Ash, Green's - Sorbus scopulina

Nettle, Stinging - Urtica dioica

Onion, Altai - Allium altaicum

Onion, Egyptian walking - Allium x proliferum

Onion, Flat-leaved - Allium senescens

Onion, Welsh - Allium fistulosum

Parsley, Hamburg rooted - Petroselinum crispum tuberosum

Roseroot - Rhodiola rosea

Saskatoon - Amelanchier alnifolia

Sorrel, Garden - Rumex acetosa

Stinkweed - Artemisia tilesii

Tarragon, French - Artemisia dracunculus

Tarragon, Russian - Artemisia dracunculus dracunculoides

Wild Potato - Hedysarum alpinum subsp. americanum

Wild Strawberry - Fragaria virginiana

Woodruff, Sweet - Galium odoratum

Yarrow, 'Cerise Queen' - Achillea millefolium Yarrow, 'Mace' - Achillea decolorans

Annual Herbs:

Broccoli - Brassica oleracea

Butterfly Weed - Asclepias tuberosa

Butterfly Bush. Silver - Buddleia sp.

Calendula - Calendula officinalis

Chervil, Flat leafed - Anthriscus cerefolium

Dill - Anethum graveolens

Endive - Cichorium endivia

Garden Cress - Lepidium sativum

Germander, Cat - Teucrium sp.

Germander, Dwarf - *Teucrium* sp.

Germander, Silver - Teucrium sp.

Honeysuckle, Tatarian - Lonicera tartarica

Honeysuckle, Wedded - Lonicera sp.

Horehound - Ballota sp.

Horseradish - Armoracia rusticana

Joe-Pye Weed - Eupatorium fistulosum

Lettuce - Butterhead - Lactuca sativa

Lettuce - leaf - Lactuca sativa

Lettuce - Romaine - Lactuca sativa L. var. longifolia

Marigold, Signet - Tagetes tenuifolia

Marjoram, Sweet - Origanum majorana

Miner's lettuce - Claytonia perfoliata

Nasturtium - Tropaeolum sp.

Parsley, Italian - Petroselinum crispum neapolitanum

Parsley, Moss Curled - Petroselinum crispum crispum

Peppermint - Mentha x piperita

Rosemary - Rosmarinus officinalis

Sage, Broad leaf - Salvia officinalis

Scarlet Runner Bean - Phaseolus coccineus

Savory, Summer - Satureja hortensis

Thyme, broad leaved - *Thymus* sp.

Seed and Plant Sources

The list does not include all possible seed and plant sources. The list reflects sources from which the Georgeson Botanical Garden has received seeds/plants. No endorsement of companies should be implied by those listed, nor criticism intended of those not listed.

Alaska Sources

Ann's Greenhouses, 780 Sheep Creek Rd, Fairbanks AK 99709

Alaska Greenhouse, 1301 Muldoon Rd, Anchorage AK 99514

Clair's Cultivations, 1364 Esro Rd, Fairbanks AK 99712

Denali Seed, PO Box 111425, Anchorage AK 99511, www.denaliseed.com

Dinkel's Fairview Nursery, HC 31 Box 5193, Wasilla AK 99687

Driftwood Nurseriers, 7.2 Mile Chena Hot Springs Rd PO Box 10462, Fairbanks, AK 99710

Hawk's Farm & Garden Center, 12 Mile Richardson Hwy PO Box 55759,

North Pole AK 99705

Holm Town Nursery, PO Box 71565, Fairbanks AK 99707

Plant Kingdom, 620 Fiedeler Rd, Fairbanks AK 99709

Risse Greenhouses, 981 Risse Rd, Fairbanks AK 99712

Seeds of Alaska, Box 3127, Kenai AK 99611

Washburn Farm Nursery, PO Box 823, Palmer AK 99645

Woodland Farms, Mile 311 Parks Hwy, Nenana AK

COMMERCIAL WHOLESALE AND RESEARCH SOURCES (SEEDS AND PLANTS NOT SOLD DIRECTLY TO THE PUBLIC)

All American Selections, 1311 Butterfield Rd Suite 310, Downer's Grove IL 60515 www.all-americanselections.org

Ball Seed Co., PO Box 335, West Chicago IL 60185 (wholesale only), www.ballseed.com Euro American Propagators (Proven Winners), PO Box 289, Bonsall CA 92003, www.euroamprop.com

Fischer USA, 6899 Winchester Circle Suite 102, Boulder CO 80301, www.fischerusa.com Goldsmith, PO Box 1349, Gilroy CA 95021, www.goldsmithseeds.com

SEED SOURCES, COMMERCIAL & RESEARCH, CONTINUED:

Green Leaf (Yoder Bros.) 2369 Old Philadelphia Pike, Lancaster PA 17602, www.green-leaf-ent.com

Kieft Seeds Holland, Elbaweg 35, 1607 MN Venhuizen, www.kieftseeds.com

Lawyer Nursery, 950 Hwy 200 W, Plains MT 59859, www.lawyermursery.com

Oglevee Ltd., 152 Oglevee Ln, Connellsville PA 15425, www.oglevee.com

Pan American Seeds, PO Box 438, West Chicago IL 60186, www.panamseed.com

The Flower Fields (Yoder Bros & Ecke Ranch), www.theflowerfields.com

USDA Plant Introduction Stations-NC7, Ames IA, www.ars-grin.gov/ars/MidWest/Ames

GARDEN SOCIETIES AND ORGANIZATIONS WITH SEED

EXCHANGES AND SALES FOR MEMBERS ONLY

Alaska Native Plant Society, PO Box 141613, Anchorage AK 99514 American Horticultural Society, PO Box 6118, Alexandria VA 22308, www.ahs.org North American Rock Garden Society, PO Box 67, Millwood NY 10546, www.nargs.org Hardy Fern Foundation, Box 60034, Richmond Beach WA 98160, www.hardyferns.org New England Wildflower Society, 180 Hemenway Rd, Framingham MA 01701, www.newfs.org

RETAIL SOURCES OF PLANTS/SEEDS

Agway, Inc. Seed Plant, 1225 Zeager Rd, Elizabethtown PA 17022

Alberta Nurseries & Seeds Ltd., PO Box 20, Bowden AB TOM 0K0

Applewood Seed Co., 5380 Vivian St, Aruada CO 80002, www.applewoodseed.com

B&D Lilies, PO Box 2007, Port Townsend WA 98368, www.bdlilies.com

Bear Creek Nursery, PO Box 411, Northport WA 99157, www.BearCreekNursery.com

Bluebird Nursery, Inc., PO Box 460, Clarkson NE 68629, www.bluebirdnursery.com

Carolina Seeds, PO Box 2658 Hwy 105 Bypass, Boone NC 28607, www.carolinaseeds.com

Clause Seed, 100 Breen Rd, San Juan Bautista CA 95045

Connell's Dahlias, 10616 Waller Rd E, Tacoma WA 98446, www.connells-dahlias.com

Cook's Garden, PO Box 535, Londonderry VT 05148, www.cooksgarden.com

Daehnfeldt, PO Box 947, Albany OR 97321, www.daehnfeldt.com

Dutch Gardens, Inc., PO Box 2037, Lakewood NJ 08701, www.dutchgardens.nl

F.W. Schumacher Co., Inc., 36 Spring Hill Rd, Sandwich MA 02563, www.treeshrubseed.com

Farmer Seed & Nursery Co., 818 NW 4th St, Fairbault MN 55021, www.farmerseed.com

Ferry-Morse Seed Co., PO Box 4938, Modesto CA 95352, www.ferry-morse.com

Fred C. Gloeckner & Co., Inc., 15 E 26th St, New York NY 10010, www.fredgloeckner.com

Gardens North, 5984 Third Line Rd N, North Gower ON K0A 2TO Canada,

www.gardensnorth.com

Germania Seed Co., 5978 N Northwest Hwy, Chicago IL 60631, www.germaniaseed.com

Gilbert H. Wild & Sons, P O Box 338, Sarcoxie MO 64862, www.gilberthwild.com

H.G. German Seeds, Inc., PO Box 398, Smethport PA 16749

Harris Seeds, PO Box 24966, Rochester NY 14624-0966, www.harrisseeds.com

Henry Field's Seed and Nursery Co., 415 N Burnett, Shenandoah IA 51602,

www.HenryFields.com

Home Harvest Seeds, 3807 Bank St, Baltimore MD 21224, www.homeharvestseeds.com Irish Eyes & Garden City Seeds, PO Box 307, Thorp WA 98946, www.irish-eyes.com

J.L. Hudson, PO Box 1058H, Redwood City CA 94064, www.jlhudsonseeds.net Jackson & Perkins, PO Box 1028, Medford OR 97501, www.jacksonandperkins.com

John Scheepers Kitchen Garden Seeds, PO Box 638, Bantam CT 06750, www.kitchengardenseeds.com

Johnny's Selected Seeds, 1 Foss Hill Rd, Albion ME 044910, www.johnnyyseeds.com

RETAIL SEED SOURCES, CONTINUED:

Jung Quality Seeds, 335 S High St, Randolph WI 53957, www.jungseed.com K. Van Bourgondien & Sons, Inc., PO Box 1000, Babylon NY 11702, www.dutchbulbs.com Lamb Nurseries, 101 E Sharp Ave, Spokane WA 99202

McClure & Zimmerman, PO Box 368, Friesland WI 53935, www.mzbulb.com Milk Ranch Specialty Potatoes LLC, 20094 Hwy 149, Powderhorn CO 81243, www.milkranch.com

Nichols Garden Nursery, 1190 N Pacific Hwy, Albany OR 97321, www.gardennursery.com

Nourse Farms, Inc., Box 485 RFD, South Deerfield MA 01373, www.noursefarms.com

Park Seeds, 2 Parkton Ave, Greenwood SC 29649, www.parkseed.com

Peter de Jager Bulb Co., PO Box 2010, So Hamilton MA 01982

Pinetree Garden Seeds, PO Box 300, New Gloucester ME 04260, www.superseeds.com

Richters, 357 Highway 47, Goodwood ON LOC 1A0 Canada, www.richters.com

R.H. Shumway's Seeds, 334 W. Stoud St, Randolph WI 53956-1274

Roseraie at Bayfields, Box R, Waldoboro ME 04572, www.roseraie.com

Royal Sluis, Inc., 1293 Harkins Rd, Salinas CA 93901

Rupp Seeds, Inc., 17919 County Rd B, Wauseon OH 43567, www.ruppseeds.com

Seeds of Change, PO Box 15700, Santa Fe NM 87501, www.seedsofchange.com

Seeds of Distinction, PO Box 86 Station A, Toronto ON M9C 4V2 Canada,

www.seedsofdistinction.com

Seedway, Inc., PO Box 250, Hall NY 14463, www.seedway.com

Select Seeds, 180 Stickney Hill Rd, Union CT 06076, www.selectseeds.com

Seymour's Selected Seeds, PO Box 1346, Randolph WI 53956, www.seymourseeduk.com

Shepherd's Garden Seeds, 30 Irene St, Torrington CT 06790, www.shepherdseeds.com

Smith Nursery Co., PO Box 515, Charles City IA 50616

Song Sparrow Perennial Farm, 13101 East Rye Rd, Avalon WI 53505, www.songsparrow.com

Stokes Seeds, PO Box 548, Buffalo NY 14240, www.stokeseeds.com

T & T Seeds, Ltd., Box 1710, Winnipeg MB R3C 3P6 Canada, www.ttseeds.mb.ca

Territorial Seed Co., PO Box 157, Cottage Grove OR 97424, www.territorial-seed.com

Thompson & Morgan Seed Co., Box 1308, Jackson, NJ, www.thompson-morgan.com

Twilley Seeds, 121 Gary Rd, Hodges SC 29653, www.twilleyseed.com

Valley Nursery, Box 4845, Helena MT 59604

Van Bloem USA, Inc., 500 Pendley Industrial Park, Cumming GA 30130

Vaughan's Seed Co., 5300 Katrine Ave, Downers Grove IL 60515

Vermont Bean Seed Co., Garden Ln, Fair Haven VT 05743, www.vermontbean.com

Vesey's Seeds, Ltd., PO Box 9000, Calais ME 04619-6102, www.veseys.com

W. Atlee Burpee & Co., 300 Park Ave, Warminster PA 18991, www.burpee.com

Waushara Gardens, N 5491 5th Dr, Plainfield WI 54966

Wayside Gardens, 1 Garden Ln, Hodges SC 29695, www.waysidegardens.com

West Coast Seeds, 3925 64 St, Delta BC V4K3N2 Canada, www.westcoastseeds.com

White Flower Farm, PO Box 50, Litchfield CT 06759, www.whiteflowerfarm.com

Wildseed, Inc., PO Box 308, Eagle Lake TX 77434

Without our dedicated volunteers, continued growth and success of the Georgeson Botanical Garden would not be possible. A big thank you to our 2006 volunteers!

(To join these valued people, call Jan Hanscom at 474-6921)

Marilyn Askelin, Alan Armbruster, Walt Babula, Kay Barbaza, Dan Baum, Kathy Baum, Cathi Bouton, Andrew Bray, Carolyn Chapin, Virginia Damron, Elizabeth Darran, Susan Dearborn, Donna Dinsmore, Raymond Dodd, Rebecca Dodd, Jenny Edwards, Sue Englebrecht, Barbara Fay, Parker Gallagher, Jane Gregory, Chris Griffin, Phyllis Haggland, Shirley Harris, Kate Hedstrom, Bette Higbie, Victoria Hill, Werner Hoefler, Helen Howard, Ted Kegler, Josh Ketola, Dee King, Joanne Klumb, John Kopeland, Rebecca Koskela, Sherry Lewis, Susan Lightbody, Carol Ann Lovejoy, Kathy MacDonald, Rose Meier, Marsha Munsell, Arlie Nethken, Carolyn Nethken, Peggy O'Neal, Lars Osborne, Sherill Peterson, Emily Reiter, Barbara Rondine, Ann Roberts, Betsy Robertson, Lou Rowinski, Kathy Seim, Annie Sherman, Molly Sherman, Libby Silberling, Melody Springer, Carl Sutton, Erika Swanson, Charlotte Sweet, Ann Swift, Curtis Thorgaard, Sarah Thornton, Eileen VanWyhe, Maggie Waite, Kari Warum, Judy Weber, George Wilson, Susie Zimmerman; Alaska Science Research Academy students and faculty, Alaska/Virginia 4-H Exchange Club, Boy Scout team 4, Boy Scout Troop 1, Boy Scout Troop 6, Boy Scout Troop 49, Boy Scout Troop 78, Girl Scout Troop 119, Girls Scout Troop 678, Herb Bunch, Junior Master Gardener 4-H Club, Master Gardeners, Spring Fest UAF students.

Special thanks to our partners and volunteers who support the Garden with seeds and other donations.

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PanAmerican seeds, Flower seeds
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About the Agricultural and Forestry Experiment Station

The federal Hatch Act of 1887 authorized establishment of agricultural experiment stations in the U.S. and its territories to provide science-based research information to farmers. There are agricultural experiment stations in each of the 50 states, Puerto Rico, and Guam. All but one are part of the land-grant college system. The Morrill Act established the land-grant colleges in 1862. While the experiment stations perform agricultural research, the land-grant colleges provide education in the science and economics of agriculture.

The Alaska Agricultural Experiment Station was not originally part of the Alaska land-grant college system. In 1898, the station was established in Sitka, also the site of Alaska's first experiment farm. Subsequent branches were opened at Kodiak, Kenai, Rampart, Copper Center, Fairbanks, and Matanuska. The latter two remain as the Fairbanks Experiment Farm and the Matanuska Experiment Farm. The USDA established the Fairbanks experiment station in 1906 on a site that in 1915 provided land for a college. The land transfer and money to establish the Alaska Agricultural College and School of Mines was approved by the U.S. Congress in 1915. Two years later the Alaska Territorial Legislature added funding, and in 1922, when the first building was constructed, the college opened its doors to students. The first student graduated in 1923. In 1931, the experiment station was transferred from federal ownership to the college, and in 1935 the college was renamed the University of Alaska. When campuses were opened at other locations, the Fairbanks campus became the University of Alaska Fairbanks.

Early experiment station researchers developed adapted cultivars of grains, grasses, potatoes, and berries, and introduced many vegetable cultivars appropriate to Alaska. Animal and poultry management was also important. This work continues, as does research in soils and revegetation, forest ecology and management, and rural and economic development. As the state faces new challenges in agriculture and resource management, the Agricultural and Forestry Experiment Station continues to bring state-of-the-art research information to the people of Alaska.

