

Annual and Perennial Herb Evaluations

2004

by The Herb Bunch Volunteers

Asiatic Garden

Virginia Damron, Barbara Rondine, and George Wilson

Kitchen Garden

Barbara Fay, Olga Cook, and Gretchen Kerndt

What's New?

Nancy Klammer and Marilyn Askelin

Perennial Garden

Marsha Munsell

Mother Nature's Medicine Chest

Nancy Klammer and Marilyn Askelin

Knot Garden

J. Dee King, Maggie Waite, Jean Coghill, and Heather Robertson

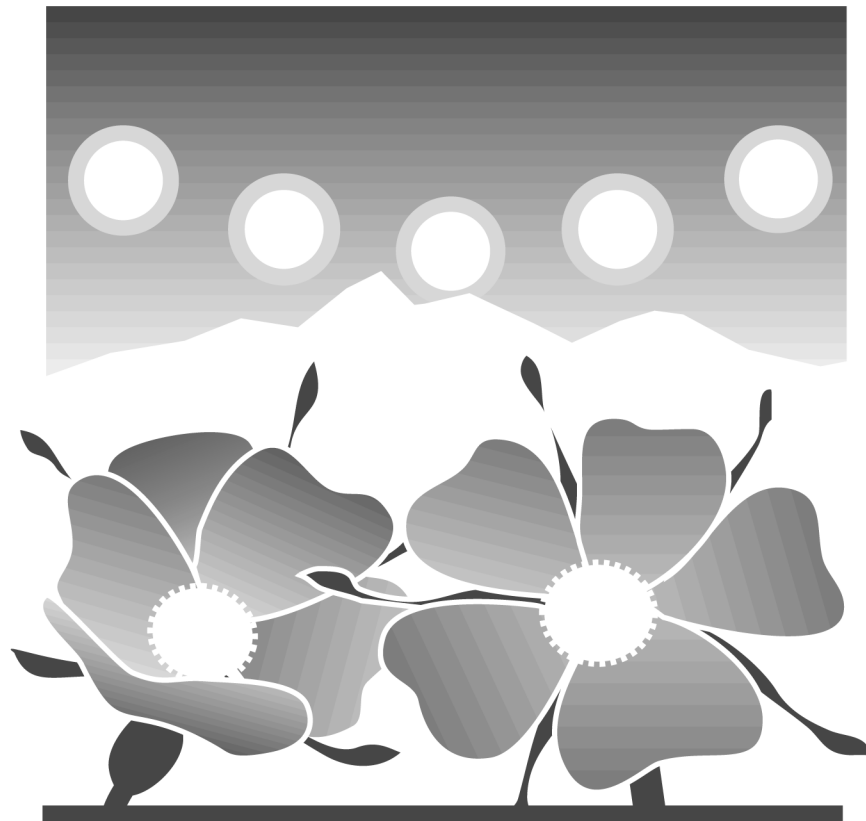
and

Pat Holloway, Professor of Horticulture

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Agricultural and Forestry Experiment Station
School of Natural Resources and Agricultural Sciences



GEORGESON
BOTANICAL GARDEN

Introduction

The word *herb* has been used for centuries to describe plants with medicinal, culinary, aromatic and other useful properties. The Dorothy Truran Herb Garden at the GBG 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. This circular is the first report of results from these trials.

The Truran Herb Garden 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 amended with 3 in (7.6 cm) of garden compost then fertilized with 3 lb per 100 ft² (147g per m²) 10-20-20s on 2 June. All amendments were hand spaded into the beds and where possible, tilled into the top 6 inches using a mini tiller. Beds were planted between 23 May and 1 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 475ft (145m), located approximately 350ft (107m) west of the garden. The last spring frost was 8 May (30°F, -1°C) (Table 1). The amount of precipitation was 3.3 inches below the past ten year average of 8.4 inches with more than half of the rainfall occurring in May and September. The season was the driest in the past ten years. The thaw degree-day accumulation was 474.6 degree-days higher than the previous ten-year average and was the warmest during the past ten years. The frost free season of 119 days compared to the previous ten-year average of 110 days.

The summer was hot, dry and extremely overcast and smoky from a record acreage burned by forest fires (Table 2). The extra warmth provided one of the best growing seasons in the Interior especially for warm-season herbs such as thyme. Local growers and homeowners grew spectacular gardens as long as they had access to irrigation. Results of herb trials are in Table 3.

Table 1. Previous ten-year weather data plus 2004

Season	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Average temperature:											
May	52.0	52.3	44.1	47.8	49	46	44	45	50.4	44.2	52
June	57.0	58.5	57.3	61.0	57.8	61	59	56.5	57.6	61.3	66
July	62.0	61.9	61.9	63.8	62.2	61	59	60.5	61.3	60.5	65
Aug.	51.0	55.6	52.1	57.1	52.4	57.5	51.5	57	53.9	55.1	62
Sept.	43.0	50.6	41.2	49.6	45.8	45	41	48.5	46.6	40.8	38
Maximum temperature	89	85	82	87	87	91	83	95	85	82	90
Growing season:											
Last frost	May 6	May 22	June 5	May 25	May 13	May 29	May 15	May 13	May 12	May 24	May 8
First frost	Aug 23	Sep 4	Aug 27	Aug 19	Sep 13	Sep 11	Sep 16	Sep 24	Sep 2	Sep 13	Sep 4
Frost free days	109	105	83	86	123	105	124	134	113	112	119
Thaw degree days	3476.3	3676.5	2810.5	3655.5	3277.5	3383	2943	3439	2980.0	3122.7	3751.0
Rainfall	7.21	10.15	8.73	5.86	9.87	8.66	8.55	5.80	9.35	9.91	5.06
Previous winter season:											
Minimum temperature	-37	-48	-48	-54	-48	-54	-50	-27	-36.3	-34.6	-44.4
Snowfall	36.3	69	47.8	38.4	30.6	31.6	62.2	39.9	39.7	33.2	51.7

Table 2. Weather data for 2002 - 2004

	May			June			July			August			September		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Average daily max. °F	64	55	64	69	74	80	73	70	76	64	66	75	57	50	47
Monthly high temp. °F	85	74	76	77	82	90	83	88	89	85	76	84	67	66	61
Average daily min. °F	37	33	40	46	48	53	50	50	53	44	44	49	36	31	30
Monthly low temp. °F	18	27	30	33	40	42	36	41	44	34	39	35	28	17	26
Rainfall (inches)	0.48	0.48	1.67	1.30	0.85	0.42	2.71	5.12	1.21	3.71	1.86	0.50	1.15	1.73	1.26

Table 3. 2004 herb results

Common Name	Cultivar	first harvest	max. veg. ht.	max. spread	flower color	foliage color	M ¹	C ²	A ³	S ⁴	W	Comments
Agastache	Apricot Sprite		20	20	light apricot	light green		X	X			Slight licorice flavor, nice aroma, prolific blooms, Fleuro-select Quality Award, used in teas and other beverages
Akashiso	Purple Perilla	08/13	26	15				X				Grew extremely well, large plants and leaves
Angelica			64	75	yellow green	medium green	X	X		4		Biennial, large, thick, impressive stems with huge flower heads and coarse foliage, needs staking in second season
Anise Hyssop			27	17	purple	green		X	X			Self-seeded from 2003, flowers of newly planted well developed by 07/12, attracts insects, strong anise scent and flavor
Aoshiso	Green Perilla		37	30				X				Plants large with many large leaves, used in salads, sushi and other dishes
Balm, Lemon			17	31		light green	X	X				Excellent lemon flavor of crinkly foliage used in teas, and a variety of culinary dishes, also has medicinal uses
Basil	Genovese Special Select FT™	06/27	19	20	white	green		X	X			Flowers were removed continuously after 06/27, bred especially for pesto
Basil	Marseillais Bush		14.5	17	white	green		X	X			Fine-leaved true bush basil, very compact and uniform
Basil	Minette	06/25	9	14		bright green		X	X			Wonderful, compact, tiny leaves, very slow to bolt
Basil	Profusion	06/25	7.5	11	white	green		X	X			Dwarfed by adjacent plants in culinary bed; large leaf basil, bolts rather quickly
Basil	Purple Ruffles	08/02	14	11	light purple	deep purple		X	X			All-America Selections winner 1987, a favorite burgundy-leaved basil, large, heavily ruffled leaves, excellent for coloring in salad dressings and vinegars
Basil, Lemon	Sweet Dani	07/12	20	14	pale yellow	bright green		X	X			All-America Selections winner 1998, excellent lemon flavor and aroma, great in salads and with fish
Basil, Pepper		07/15	14	14		dark green		X	X			Flavor not as good as expected

1= medicinal uses, 2= culinary uses, 3= aromatic, 4= winter survival of perennials with 1 being having the worst survival and 4 being the best.

Table 3. 2004 herb results, cont.

Common Name	Cultivar	first harvest	max veg. ht.	max spread	flower color	foliage color	W				Comments
							M ¹	C ²	A ³	S ⁴	
Basil, Thai	Siam Queen		14	20	dark purple		X	X			All America Selections winner 1997, attractive dark green leaves, spicy aroma and flavor, excellent with Thai and Vietnamese dishes
Bergamot, Wild							X	X			
Borage, White			29	42	white	pale green	X				Bushy, bigger than expected, upright stems stiffer than blue types
Chervil, Curled	Crispum						X				Did poorly due to overcrowding, difficult to measure plants
Chinese Lantern Plant			16	18							Poor growth, no flowers until late in season, stayed green
Chives	Grande		33	17	lavender pink, purple	dark green	X	X	4		Very productive, robust, has larger leaves than most chives, overwintered well
Chives, Garlic			18	1.5	white	bright green	X				Flat-leaved variety from Japan, mild garlic flavor, fairly productive
Cicely, Sweet			28	50			X				Early to emerge in spring, excellent vegetative growth with sweet, slightly anise-scented leaves and stems, very productive
Cilantro, Chinese Parsley	Santo		25	26		light green	X				Went to seed early even though it is advertised as the slowest cilantro to bolt, used seeds in Sambal in place of leaves
Comfrey			25	45		medium green	X				Needed more room, very large rosette of pebbly, rough leaves, no flowers the first year
Coneflower, Purple	Magnus		12	4		medium green	X				Poor growth, may have been due to overcrowding
Costmary			17	60	white	medium green			4		Amazing spread of one-year-old plants, strap-shaped leaves crowded in large clumps, sweet scent, used in teas, herb pillows, beverages and salads
Dill	Fernleaf		37		yellow	dark green	X				Poor productivity rating due to crowding, less leggy and rangy than other cultivars, All America Selections winner 1992
Dong Quai			18	20			X	X			Seedlings do not transport well, finally adapted and grew well, primarily a medicinal herb but used in salads and seafood
Fennel, Bronze	Rubrum		40	44	yellow	green/red	X				Not the best growth, planted too close together, foliage is very finely dissected, lacy appearance, has a bronze/red overtone
Feverfew			20	19	white w/ yellow center	medium green	X				Bloomed all summer, great as ornamental but no flavor or aroma
Garlic, Society			20	26			X	X	X		Very graceful, grew well, had a nice pronounced garlic flavor
Geranium	Prince of Orange		12	32	pink & maroon	pale green	X	X			Beautiful, large, 1-2 inch blooms, long lasting, orange-scented
Germander						medium green	X				Pruned and shaped all summer to form knot garden, grown with Satolina as contrast, was slower growing than Santolina

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Table 3. 2004 herb results, cont.

Common Name	Cultivar	first harvest	max veg. ht.	max spread	flower color	foliage color	M ¹	C ²	A ³	S ⁴	W	Comments
Ginger			18	22	green	medium green	X	X				Plant died when moved outdoors, no useable root
Horehound			18	22	green	medium green	X					Used in horehound candies, an old-fashioned cough remedy
Lavender, English	Hidekote		11	10	dark purple	silver gray green				X		Compact plant
Lavender, English	Kew Red		13	11	pink & cerise	gray green				X		Very sweet lavender aroma
Lavender, English	Pink Perfume		10	17	pale pink	gray green				X		Grows from seed
Lavender, Fernleaf				14	lavender	blue green				X		Floppy, not good trimmed, trimmed and shaped all season finely dissected leaves for soft, lacy appearance
Lavender, French	Fragrant Butterfly		21	17	pinkish lavender	gray green				X		Winged blooms, very striking, grows from seed
Lavender, French	Goodwin Creek		17	18		gray green				X		Beautiful toothed foliage
Lavender, Lavandin	Fred Boutin		20	20	lavender	whitish gray green				X		Dense wooly silver with violet flowers
Lavender, Lavandin	Silver Edge		9	8		gray green w/cream edge				X		Large, flat shimmering leaves
Lemon Grass			19	18								Slow growth, minimal usable production
Lovage	Magnus		42	36	yellow	green		X			3	Four transplanted to south side of bed, drooping stalks
Marigold, Signet	Lemon Gem		15.5	22	yellow	medium green		X	X			Some self-seeded plants from 2003, mounds of finely divided foliage topped with hundreds of single yellow blooms, excellent for cooking and teas, used in fabric dyes
Marigold, Signet	Orange Gem		14	16	orange	green		X	X			Some self-seeded plants, mounding plants covered with blooms nearly all season, used in fabric dyes
Marjoram, Sweet	Max		10	9	white	green	X	X				Crowded, strong, spicy flavor, great for soups, sauces, and meat dishes, used in fabric dyes
Mint, Chocolate			13	36				X	X		4	
Mint, Ginger	Variegata		19			green/yellow		X	X		3	Very productive, plants grown in plastic tubs to confine spread, variegated foliage
Mitsuba			12	9				X				Insect damage to leaves, did not grow well, no usable production
Nettle, Stinging	Max		46	48		light green	X	X				Max spread is for 6 plants, plants grew very bushy and tall native to coastal Alaska, used in teas and medicines
Onion, Altai			30	26	white	dark green					4	Large, round edible stems, biting flavor, attracts pollinators
Onion, Senescent			20	24	white	dark green					4	Flat leaves like daffodil, mild flavor, attracts insect pollinators
Onion, Welsh	Gribovski				white	dark green					4	Large, round stems. biting flavor, excellent growth from crown

1= medicinal uses, 2= culinary uses, 3= aromatic, 4= winter survival of perennials with 1 being the worst survival and 4 being the best.

Table 3. 2004 herb results, cont.

Common Name	Cultivar	first harvest	max veg. ht.	max spread	flower color	foliage color	W				Comments
							M ¹	C ²	A ³	S ⁴	
Oregano, Golden	Aureum					golden yellow		X			Brown shoot tips early, fewer in late season, excellent color contrast with other plants, clipped and shaped all season
Oregano, Greek			9	9	white	dark green		X			True oregano from mountains of Greece, strong flavor, excellent productivity all season
Parsley, Curled	Green River		16	21		dark green		X			Very prolific, bushy plant with curly leaves, branches well to form ornamental mounds
Parsley, Italian			24	44		dark green		X			Glossy, dark green leaves in large mounds, very productive
Parsley, Moss Curled			15	24		green		X			Finely dissected and curled leaves, grown in Alaska since the early 1900s, very productive bright green leaves and stems
Pepper, Chili	Thai		31	13				X	X		Extremely productive, about 200 chilis on 6 large plants, many did not turn red, very hot, used to make sambal
Peppermint	Variegata		21	18	pink	gray/white		X	X	X	Excellent for indigestion, variegated foliage
Rau Om			3.5	4				X			Very poor growth all season, foliage production not sufficient to harvest
Rosemary	Gorizia		23	13		medium green		X	X		Great upright rosemary! new this year, did extremely well, very strong growth, good shape
Rosemary	Huntington Carpet		14	35		medium green		X	X		Super trailing rosemary
Rosemary	Tuscan Blue		11	6		medium green		X	X		Upright growth
Sage, Garden			21.5		pale blue	gray green	X	X			Too crowded to measure, productive with large, flat leaves excellent for meat, cheese and egg dishes, some medicinal uses
Sage, Golden	Aurea		13	23		yellow/green	X	X			Interesting variegated foliage, spreads well
Sage, Purple	Purpurea		11.5	13		purplish green	X	X			Not as prolific as the green sage, nice purplish leaves, little difference in flavor and aroma from green kinds, crowded
Santolina, Dwarf						light green			X		Outstanding in knot garden, filled in well when clipped and shaped, used in perfumes, potpourris, dried arrangements
Saskatoon	Martin		82	61	white	dark green				4	Few fruit this summer
Saskatoon	Smoky		83	67	white	dark green				4	
Savory, Lemon			8.5	12		green		X			Flowers appear along stem, crowded by adjacent plants
Savory, Summer			29	30	purple	green		X			Overcrowded, flowers grow along stem, difficult to measure
Sorrel, Garden	Blonde de Lyon							X	X		
Sorrel, Garden	Rhubarb Pie		2.5	2		whitish green	X	X			Very poor growth, a total bust!

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Table 3. 2004 herb results, cont.

Common Name	Cultivar	first harvest	max veg. ht.	max spread	flower color	foliage color	W				Comments
							M ¹	C ²	A ³	S ⁴	
Tarragon, French			18	21.5		green		X		4	Planted in 2003 as perennial, susceptible to lodging due to overcrowding
Thyme, Lemon	Purple Carpet		1.5	20	purple	medium green	X	X	X		Beautiful, low-growing creeping thyme
Thyme, English	Blond de Lyon		12	20	light purple	dark green	X	X			Large, dark green leaves, very productive all season, height and spread is of plant mass
Thyme, Lavender						dark green		X			Slow growth, became sparse and bare late in season, pruned all season for knot garden, citrus aroma and flavor
Thyme, Lemon	Aureus		9	12	purple green	yellow/	X	X			Variegated foliage
Thyme, Lemon	Goldstream			clipped		light green w/gold flecks	X	X			Good color contrast, responded well to clipping all season, well matted and full
Thyme, Lemon	Magic Carpet		1	36	purple	medium green	X	X	X		Lowest growing, only lemon thyme from seed, grew and spread well, formed creeping mat with tiny purple flowers
Thyme, Lime				clipped		light green	X	X			Good foliage color contrast in knot garden, remained matted and full following clipping
Verbena, Lemon			34	24		green		X			Productive good despite overcrowding
Wormwood, Silver Mound	Nana			clipped		silvery green	X	X	X		Very good color contrast with silvery foliage, somewhat floppy growth habit for knot garden, trimmed well, soft, mounding, compact foliage with tiny, dissected leaves.
Yarrow	Cerise Queen		18	20	red	yellow-green	X	X			
Yarrow, Greek	Moonshine		21	13	light yellow	light green					Silvery light green, finely dissected leaves with clusters of flowers, ornamental, medicinal and cosmetic uses

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

All America Selections	Flower and Vegetable Seeds
Ball Seed	Experimental Flower Seeds
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Harris Seeds	Experimental Flower and Vegetable Seeds
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Acknowledgements

Without our dedicated volunteers, continued growth and success of the Georgeson Botanical Garden would not be possible. A big thank you to our 2004 volunteers! *To become a volunteer, call Jan Hanscom at 474-6921.*

The Herb Bunch: The Herb Bunch is an organized group of local herb enthusiasts who meet monthly on the 3rd Thursday from 6:30 - 8:30 PM for fun and educational programs throughout the year. They design, plant and maintain the herb beds at the Georgeson Botanical Garden. Member Information: Dues: \$10/year. Contact Dee King at 488-7692.

Scientific Names of Herbs in the Trial Garden

8
Agastache *Agastache aurantiaca*
Akashiso (Purple Perilla) *Perilla frutescens*
Angelica *Angelica archangelica*
Anise Hyssop *Agastache foeniculum*
Aoshiso (Green Perilla) *Perilla frutescens*
Balm, Lemon *Melissa officinalis*
Basil *Ocimum basilicum*
Basil, Pepper *Ocimum selloi*
Bergamot, Wild *Monarda fistulosa*
Borage, White *Borago officinalis*
Chervil, Curled *Anthriscus cerefolium*
Chinese Lantern Plant *PhysalisAlkekengi*
Chives *Allium Schoenoprasum*
Chives, Chinese Garlic *Allium tuberosum*
Chives, Garlic *Allium tuberosum*
Cicely, Sweet *Myrrhis odorata*
Cilantro, Chinese parsley *Coriandrum sativum*
Comfrey *Symphytum officinale*
Coneflower, Purple *Echinacea purpurea*
Costmary *Chrysanthemum balsamita*
Dill *Anethum graveolens*
Dong Quai *Angelica polymorpha*
Fennel, Bronze *Foeniculum vulgare dulce*
Feverfew *Tanacetum parthenium*
Garlic, Society *Tulbaghia violacea*
Geranium, Orange-scented *Pelargonium x citrosum*
Germander *Teucrium chamaedrys*
Ginger *Zingiber officinale*
Greenís Mountain Ash *Sorbus scopulina*
Horehound *Marrubium vulgare*
Kinnikinnick *Arctostaphylos uva-ursi*
Lavender, English *Lavandula angustifolia*
Lavender, Fernleaf *Lavadula multifida*
Lavender, Fragrant Butterfly *Lavadula stoechas pedunculata*
Lavender, French *Lavandula dentata*
Lavender, Lavandin *Lavandula x intermedia*

Lemon Grass *Cymbopogon citratus*
Lovage *Levisticum officinale*
Marigold, Signet *Tagetes tenuifolia*
Marjoram, Sweet *Origanum majorana*
Mint, Chocolate *Mentha x piperita var. piperita*
Mint, Ginger *Mentha arvensis*
Mitsuba *Cryptotaenia japonica*
Nettle, Stinging *Urtica dioica*
Onion, Altai *Allium altaicum*
Onion, Senescent *Allium senescens*
Onion, Welsh *Allium fistulosum*
Oregano, Golden *Origanum vulgare*
Oregano, Greek *Origanum vulgare hirtum*
Parsley, Curled *Petroselinum crispum crispum*
Parsley, Italian *Petroselinum crispum neapolitanum*
Parsley, Moss Curled *Petroselinum crispum crispum*
Pepper, Chili *Capsicum annum*
Peppermint *Mentha x piperita*
Rau Om *Limnophila aromatica*
Rosemary *Rosmarinus officinalis*
Sage, Garden *Salvia officinalis*
Sage, Golden *Salvia officinalis*
Santolina, Dwarf *Santolina chamaecyparissus*
Saskatoon *Amelanchier alnifolia*
Savory, Lemon *Micromeria biflora*
Savory, Summer *Satureja hortensis*
Sorrel, Garden *Rumex acetosa*
Tarragon, French *Artemisia dracunculus*
Thyme, Creeping Lemon *Thymus praecox*
Thyme, English *Thymus vulgaris*
Thyme, Lavender *Thymus thracicus*
Thyme, Lemon *Thymus x citriodorus*
Thyme, Lime *Thymus sp.*
Verbena, Lemon *Aloysia triphylla*
Wild Strawberry *Fragaria virginiana*