

Alaska Hardy Plants that may work for PNW gardens Selections from the Jensen-Olson Arboretum

Prepared for the Northwest Flower and Garden Festival 2022 Plan Ahead: Alaska Hardy Plants

Text and photos © Ginger Hudson, Arboretum Manager and Horticulturist, ginger.hudson@juneau.org

Hardy perennials and woody plants include, from left to right: Acer palmatum, Hosta 'Francis Williams'; Spiraea japonica 'Mertyann'; Primula florindae (tall yellow-orange), Astrantia major, Masterwort (pink flowers); Geranium pratense 'Dark Reiter' (dark purple); Petasites japonicus, large round leaves in background; and Ribes bracteosum grey currant above Petasites.





Kalmia polifolia, bog laurel.





Above: Ligularia stenocephala, 'The Rocket' (yellow spikes), and Asiatic lilies. Left: Astrantia major, masterwort We've all been through some challenging natural disasters in the past few weeks, months, and recent years. These may seem like isolated events as we contend with our surroundings, yet the changes in climate predictability connect us in many ways. I have been in my position at the arboretum for 13 months, 9 of those months have set weather records: for snowfall, heat, or rainfall. Just on January 21 this year, record rainfall was noted, and it presented the arboretum with ponds and puddles. What is this now, an aquarium garden? I will not know until this summer how plants fared as the ground thawed and the roots soaked.

Snow is what we'd rather see on the ground. In Alaska we are intimately connected to snow. It benefits our gardens acting as a blanket in winter, and lights up long dark winter nights. Yet, in recent years we are experiencing open ground in January. Then snow returns in a flash, burying everything quickly. Increased winds and extended periods of wet ground exacerbate plant stability. The entire city is reckoning with more and more tree-fall episodes. Occasionally, the landscape is pummeled by early snow before trees and shrubs lose their leaves. As a public garden we try to mitigate damage by shaking snow off the plants. But there is limited staff to race against time. I've also heard this is an issue all the way down the Pacific coast from Alaska to Washington.

For those of us who retreat to our landscapes to relax, we're all experiencing stress about the erratic changes in weather on our gardens. Some of you may be new to gardening, some have been digging in the dirt for years. But just as the previous horticulturist, Merrill, benefited from Caroline's decades of experience, I have the benefit of Merrill's trials and errors. I'm here to share some ideas, some hardy plants that have survived, and thrived through southeast Alaska seasons, weather predictable, or not. Though I can't promise what will live through mud and landslides.





Left: the four cultivated acres of the arboretum. Right: Spiraea douglasii.

Here is a brief visit to the Jensen-Olson Arboretum in Juneau Alaska to see what has stood the test of time and the dramatic changes in weather over the past five years. A chart at the end of this document lists a variety of perennial and woody plants on site, though it is not exhaustive.

Southeast Alaska CHIEKAT KWAN HUNA KWAN H

Tlingit Ancestral Lands

Map by Andrew Hope III

JOA resides in the land of the Aak'w kwáan Tlingit who prospered and lived with the environment for thousands of years. Navigators call this the worldfamous Inside Passage. The arboretum is just a few (hundred) miles north of Seattle, but within the same Pacific Temperate Rainforest. JOA is directly on a coast, quite rare for a public garden.

The land was taken advantage of by a German family in the late 1880s who arrived with the flush of gold miners in Southeast Alaska. They raised children here, along with horses, and grew their own food crops to sustain themselves through decades of hard-rock mining. One daughter, Irma, branched out to raising mink, chickens, and even a few cows. She also tended a magnificent apple tree still on the grounds today believed to be 110 years old. In those days there was not much time for fanciful gardening. However, it is believed a gorgeous *Iris gracchus* sailed over with the Germans snugly tucking into a steamer trunk. A couple of durable plants for sure!

Irma's nephew Carl inherited the property and relocated here with his bride Caroline. By the 1950s, they didn't have to haul ore or tend cows in a rainforest, they spent time building colorful gardens.

Caroline was active with the Juneau Garden Club and contributed a wealth of information to their book *Gardening in Southeast Alaska*. She had a fondness for primroses so joined the American Primrose Society early on. Caroline wished her gardens to be enjoyed by everyone. She worked with the Southeast Alaska Land Trust to create the first conservation easement in the region. The 14 acres Caroline tended was donated to the City and Borough of Juneau.

Caroline's vision was to use the property to educate the public on horticulture, landscape, natural sciences, and to preserve the aesthetics and culture of the place. Though she asked that the preserve be called an arboretum, it took five years for the first horticulturist and manager, Merrill to plant enough trees to attain official Level I Arboretum accreditation from ArbNet.

Seeing that the gardens were strewn with a wide variety of Primula species, Merrill worked tirelessly to build a quality collection. JOA received certification in 2012 for holding the Nationally Accredited Plant CollectionTM for the genus *Primula*. At the time of recognition, there were approximately 200 species and cultivars on site. Each spring the primroses provide a calliope of candy colors blanketing garden beds. [*Primula denticulata, P. veris, P.* 'City of Bellingham', *P.* 'City of Juneau', *P.* 'Lady Greer', and Juliaes]. As the varieties rotate through bloom cycles, taller species appear mid- to late summer, [*P. japonica, P. chungensis, P. secundiflora, P. alpicola, P. capitata*] and some bloom until near to frost [*P. florindae*]

Naturally, a few species decided it wasn't warm enough on the Alaskan coast, or snow lingered too long-to be expected when gardeners test new plants. Many hardy perennial souls live on today that Caroline planted over her nearly 60 years gardening.

Here's a look at some darn-tough plants that may enjoy time your gardens. This list of perennials and woody plants takes you through the arboretum somewhat chronologically through a season beginning when the crocus push the snow away and recedes to a distant memory. When you can feel the buds of trees just wanting to pop, and the alien buds of *Petasites japonicus*, Japanese butterbur, polka-dot the detrius left from the previous summer. Though it is a plant that requires containment and vigilant wrangling, it's one of the first blooms onsite. This member of the Asteracea family is a mass of nectaries providing a buffet for the native bumblebee that has hibernated all winter and now is ravenous.

A marvelous example of stamina rests quietly on a bed of moss. It is a diminutive, buttery-yellow primula suspected of being on the property for one-hundred years, affectionately called 'Irma's Gold'. Many decorative primula survive in dormancy thorugh our maritime winter even if snow melts, and returns. These gems have been in the gardens for decades, The hardiest and most prolific, since Caroline's early garden days: *Primula denticulata, P. juliaea, P. japonica, P. pulverulenta, P. elatior*, among them.

Bulbs of course, are adept at hibernations. Narcissus 'Tweety Bird' has been on site since 2014. Some decades old bulbs require a watchful eye for their penchant to run, *Hyacinthoides hispanica*, but

return faithfully year after year.

Woody and herbaceous perennials survive snow, rain, and wind. From left to right: *Physocarpus opulifolius*, ninebark 'Diabolo'; *Bergenia cordifolia*, pig squeak; *Rodgersia pinnata*; *Filipendula sp.*, meadowsweet; *Acer palmatum* 'Osakazuki'.







Left: Stately yellow and orange poms of Primula florindae; right: Petasistes japonica, Japanese butterbur, fuki.

Native insects have adapted to varieties of nonnative perennials. If these plants benefit the endemic wildlife, can we use them to educate about pollination and other wildlife uses? So far, we have found that some plants are helpful and beautiful without running rampant: *Astilbe, Astrantia, Iris, Doronicum, Actea, Dianthus, Saxifraga, Achillea*, and more. Their beauty pleases the garden visitors.

Varieties of *Dianthus, Saxifraga, Rubus, Trollius* and *Doronicum* survive in garden beds at the beach fringe, pelted by rain, and sleet, and wind, yet return to spray the landscape with vivid color in summer.

Heirloom plants generally are someone's favorite. These types of "pass-along plants" have endured through a garden's life. Iris 'Morning Splendor' arrived from Iowa via Merrill at the start of his tenure in 2007. Irises are one of the favorite pass-alongs, they are easy to divide and most are easy to grow.

The arboretum has tested many plants over the past thirteen years, woody species among them. Several Japanese maple varieties were not qualified for the maritime environment. The varieties that have survived are delicate, bold, and showy. These include *Acer palmatums*: 'Sister Ghost', 'Bloodgood', 'Full Moon', and ribbon leaf. There's also *A. davidii, A. griseum*, and *A. glabrum*.

Some woody plants are completely buried in snow at times and spring back as the sun rises high above the horizon: *Taxus x media*, *Picea abies*, *P. sitchensis*, *Pinus parviflora*, and *Larix decidua*. A young *Picea contorta* 'Chief Joseph' has made it through a couple of years, we hope it will be a success. We've welcomed plants from close gardening zones, *Betula papyrifera*, and *Larix laricina*. Betula species sometime bend way to the ground under early snowfall.

Even more resourceful, we strive to elevate our regional endemic plants such as, *Platanthera sp.*, *Dodecatheon pulchellum*, *Kalmia microphylla*, *Ribes lacustre*, and *Polypodium glycyrrhiza*. Some have proven durable in a curated environment, *Spiraea douglasii*, *Viola glabella*, and *Pyrola asarifolia*.

This year the Jensen-Olson Arboretum celebrates 15 years of being a free public garden managed by CBJ, with an on-site horticulturist and manager. This year, like every year, the arboretum will test new varieties of plants; we'll add to the primrose collection; we'll request specimens from gardens in similar climates; and we'll keep exploring our backyard looking to highlight regional plants.

Public gardens and home gardeners do not have to do the research on their own. We use resources that just about anyone can access: our local garden clubs, local master gardeners, the forest service, native plant societies, national organizations like the National Rock Garden Society and the American Primrose Society, and our neighbors. We'll talk to our friends in colder climates, and to those in areas used to more snow. Gardeners that live near public gardens can take advantage of their success by purchasing from botanical garden and arboreta plant sales. Great local resources include the University of Washington Botanical Garden <u>https://botanicgardens.uw.edu;</u> Bellevue Botanical Garden <u>https://bellevuebotanical.</u> org; Washington state Cooperative extension, <u>https://extension.wsu.edu;</u> and The Washington Native Plant Society <u>https://www.wnps.org</u>. I hope you've enjoyed a look at the Jensen-Olson Arboretum, your commiserating northern neighbor. Know that we all have to look at our landscapes as benefiting from opportunities to "replace plants as needed".

After all, this region is not that old. Only 11,000 years ago did the Cordilleran Ice Sheet retreat. Well, most of it; and the botany is continually shifting, though not as fast as it will in this period of climate change.

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Thank you to Janet Endsley and the organizers of the NWFGF for your perseverance. Thank you to all the medical workers, airlines, hotels, restaurants, and service folks involved. And, of course, to all of you lifelong students of gardening, thank you for your interest.

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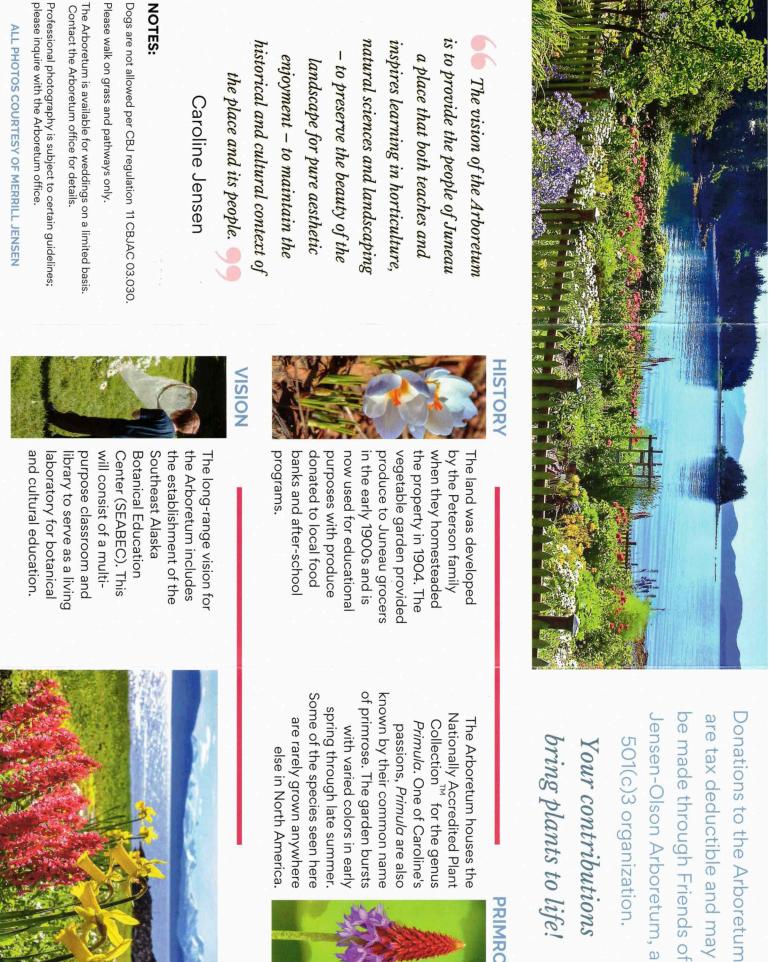


http://www.friendsjoarboretum.org













Alaska Hardy plants

Perennials thiving at the Jensen-Olson Arboretum, Juneau, AK and Southeast Alaska prepared for the Northwest Flower and Garden Festival, 2022

Light: S= full sun; PS= part sun; Sh= shade; A= any

Water: GD= good drainage; M=damp to moist; W= raingarden, stream side, low spot, etc; A= any Habit: G= grouncover; S= potential spreader; W= woody

Zone: these are general guidelines, be aware with climate change they may vary

Genus	Species	Common	Light	Water	Habit	Zone
Petasites	japonicus	Japanese butterbur, fuki	PS	W	S	5-9
Crocus	sp.			GD	S	3-8
Primula	sp.	'City of Bellingham'	PS	GD	G	4-9
Primula	sp.	'City of Juneau'	PS	GD	G	4-9
Narcissus		'Tweety Bird'	S	GD		4-8
Primula	denticulata	Drumstick primrose	S	GD	S	2-8
Primula		Belarina [®] series	S	GD		4-8
Primula	elatior		S, PS	GD, M		4-8
Hyacinthoides	hispanica	Spanish hyacinth	S, PS	А	S+	3-8
Erythronium	sp.	Fawn lily, 'Pagoda'	PS	Μ		4-9
Corydalis	x solida	'Beth Evans'	S	GD		5-8
Corydalis	sp.	white	S, PS	GD		5-7
Trillium	sp.	white	PS, Sh	Μ		3-7
Trilium	erectum	'Wake Robin'	Sh	М		3-7
Dicentra	formosa	western bleeding heart	Sh	GD		4-8
Dicentra	exima	eastern bleeding heart	Sh	GD	G	3-9
Doronicum	oriental	Leopard's bane	S	GD		4-8
Pulmonaria	angustifolia	'Azurea', +other var's	Sh	GD, M	G	4-8
Fritillaria	meleagris	checkered lily	S, PS	GD		3-8
Rhododendron		'Baden Baden'	S, PS	М	W	4-7
Pulsatilla	vulgaris	Pasque flower	S	GD		3-8
Rheum	palmatum	Chinese rhubarb	PS	GD		5-7
Trollius	europaeus	globe flower	S	GD		3-8
Glaucidium	palmatum	Japanese woodland pop	ţ Sh	GD, M		3-8
Primula	matthiolii		Sh	GD, M	G	3-8
Iris	germanica	'Morning Splendor'	S	М		3-9
Iris	reticulata	'Pauline'	S	М		3-7
Iris	Chrysoprages	Black iris	S	М		3-8
Iris	germanica	'Gracchus'				4-8
Kalmia	polifolia	Bog Laurel	S	M, W	W	2-6
Hemerocalis	sp.	daylilies				3-9
Dianthus	sp.	various	S	GD		3-9
Acer	griseum	Paperbark maple	S	GD	W	5-8

Acer	palmatum	'Bloodgood'	S, PS	GD	W	5-8
Acer	palmatum	'Sister Ghost'	PS	GD	W	5-9
Acer		Vine maple	S	GD	W	5-9
Acer	palmatum	Ribbon leaf	S, PS	GD	W	6-9
Acer		'Full Moon'	PS	GD	W	5-8
Acer	glabrum	var. douglasii	S, PS	GD	W	4-8
Acer	davidii	-	PS	GD	W	5-7
Primula	chungensis	orange	PS	М		4-8
Viola	glabella	yellow	PS	M, W	G	2-9
Dodecatheon	pulchellum	shooting stars	S	М		2-8
Rododendron		'Ken Janek'	S	Μ		4-7
Parameconopsis	cambarica	Welsh yellow poppy	PS	GD		3-7
Papaver		Oriental poppies	S	GD		3-8
Saxifraga	x arendsii	mossy saxifrage	S	GD	S	4-8
Saxifraga	x urbium	'London Pride'	S	GD		4-7
Saxifraga	x geum		S, PS	GD	G	4-7
Clematis	alpina	'Stolwijk Gold'	S, PS	GD		4-8
Achellia	millifolium	varieties	S, PS	GD		3-9
Primula	florindae		S, PS	М		3-7
Larix	occidentalis		S	GD	W	4-8
Larix	decidua	weeping larch	S	GD	W	2-8
Pinus	parviflora	Japanese white pine	S, PS	GD	W	4-9
Pinus	contorra	shore pine		GD	W	4-8
Pinus	contorta var. latifolia	'Chief Joseph'	S	GD	W	4-8
Astrania	major	masterwort	S, PS	GD		4-7
Rodgersia	pinnatia		PS	М		5-7
Rodgersia	podophylla		PS	М		5-8
Cornus	sericea	'Hedgerows Gold'	S, PS	GD	W	4-9
Cornus	alba	'Elegantisima'	S	GD	W	4-9
Cornus	sanguinea	'Midwinter Fire'	S <i>,</i> PS	GD	W	4-7
Cornus	stolonifera	'Silver and Gold'	S <i>,</i> PS	GD	W	4-7
Physocarpus	opulifolius	ninebark, 'Diabolo'	S <i>,</i> PS	GD	W	3-7
Physocarpus	opulifolius	'Center Glow	S	GD	W	3-7
Aruncus	diocus	Goat's beard	S, PS	GD, M		3-7
Aruncus	aethusifolius	dwarf goats beard	S, PS	GD, M		3-9
Spiraea	japonica	'Anthony Waterer'	S, PS	GD	W	4-8
Spiraea	douglasii		S, PS	GD, M	W	3-7
Spiraea	japonica	'Mertyann'	S, PS	GD	W	3-8
Rosa	alba	'Maiden's Blush'	S	GD	W	4-9
Astilboides	tabularis		PS, Sh	М		5-7
Primula	vialii	poker primula	PS	М		3-9
Ribes	Rubrum	'Red Lake' or other red	S, Ps	GD	W	4-8
Rubus	spectabilis	high salmonberry	PS	Μ	W	4-8
Ribes	lacustre	black currant	S, PS	GD	W	4-8
Ribes	alpinum	alpine currant	S <i>,</i> PS	GD	W	2-7

Ribes	nigrum	black currant	S <i>,</i> PS	GD	W	4-7
Pyrola	asarifolia	wintergreen	PS, Sh	Μ		3-7
Polypodium	glycyrrhiza	Licorice fern	S, PS, S	IM		4-9
Paeonia		herbaceous	S	GD		2-8
Astilbe	x arendsii		S <i>,</i> PS	GD		3-8
Astilbe	x japonica		S <i>,</i> PS	GD		4-9
Astilbe	chinensis	var. pumila	S <i>,</i> PS	GD	S	4-8
Sedum	kamschaticum		S <i>,</i> PS	GD	G <i>,</i> S	3-8
Hylotelephium		'Autumn Joy'	S <i>,</i> PS	GD		3-9
Cercidiphyllum	japonicum	Katsura	S <i>,</i> PS	GD	W	4-8
Monarda			S	GD		4-9
Picea	sitchensis	dwarf spruce 'Papoose'	S. PS	GD	W	3-8
Picea	abies	Bird's nest spruce	S, PS	GD	W	2-8
Corylus	avellana	'Red Majestic'	S, PS	GD	W	4-8
Fargesia	nitida	blue fountain bamboo	S, PS	GD, M		5-9
Lilium		Asiatic varieties	S	GD		4-8
Lilium	tigrinum		S, PS	GD		4-9
Ligularia	stenocephala	'The rocket'	PS	GD, M		4-8
Ligularia	dentata	'Britt-Marie Crawford'	PS	GD, M		4-9
Solidago	sp.					4-10
Aconitum	napellus	monkshood	S, PS	GD, M		3-7
Aconitum	carmichaelii	'Arendsii'	S, PS	GD, M		3-7
Aconitum	x cammarum	'Stainless Steel	S, PS	GD, M		3-7
Helinium	atumnale	Sneeze weed	S	GD		3-9
Hosta			PS, Sh	GD, M		4-8
Actea	simplex	'Brunette' bug bane	S	GD		3-8
Corydalis	lutea	yellow	S <i>,</i> PS	GD, M	S	5-7
Chelone	obliqua	Turtlehead	S <i>,</i> PS	GD, M		5-9
Deschampsia	caespitosa	'Northern Lights'	S <i>,</i> PS	GD		4-9
Cotoneaster	acutifolius		S <i>,</i> PS	GD	W	4-7
Taxus	x media	yew	PS	GD	W	4-7
Taxus	cuspidata	yew	PS	GD	W	4-7
Aronia	melanocarpa		S	GD	W	3-8
Actinidia	kolomikta	arctic kiwi	S, PS	GD	W	3-8

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