Borealis

The Newsletter of the

Alaska Native Plant Society

PO Box 141613, Anchorage, Alaska | December 2023 – January 2024

Join us at our Next Meetings!

Monday, December 4, 7:00 PM

Via Zoom Only

Main Topic: **"How Climate Shapes Past, Present & Future Tree Species Distributions in Coastal Alaska"**
Speakers: **Paul Hennon & Robin Mulvey**

Aquatic Plant Families: **Sparganiaceae,**
Presenter: Justin Fulkerson

Medicinal Plants: ***Moneses uniflora*** **(Common Name - Single delight)**
Presenter: Val Cancino

Monday, January 8, 6:30 PM

Via Zoom Only

Main Topic: **"Eastern Beringian Grasslands: An Endangered Ecosystem"**
Speaker: **Bruce Bennett**

Aquatic Plant Families: **Araceae (Arum family)**
Speaker: **Preston Villumsen**

Virtual Meeting Link: Join via Zoom
Meeting ID: 938 2833 2935
Passcode: 362610

For the latest information about ANPS events and field trips, go to www.ak-nps.org/

Seeds of Spring

It is often said that native landscaping's biggest challenge is finding the plants. But seeds are abundant, readily available, and inexpensive to boot! If only someone would collect them...Luckily, members of the ANPS community have been planning ahead. They have been collecting seeds of Alaska native plants from both wild and cultivated gardens. They've dried and packaged these seeds and they are ready to be passed on to you for planting your dream garden.

And if you think you have to wait for the ground to thaw before you can grow beautiful and beneficial species, think again—for most native plants in Alaska, fall to early winter is the best time. Many wildflowers, trees and shrubs have seeds that need to experience a winter cold period before they will germinate. That doesn't mean shoveling snow off your garden plot right now. Fortunately, the methods are simple, and the seeds are ideally suited to germinate outdoors in pots. Learn from our experts:

Attend Our In-Person Seedy Saturday Event

December 2, 2023: 1-3 pm Alaska Botanical Gardens

- **Pick up 2023 Alaska native seeds you requested via our online form (see instructions below)**
- 1:30 pm talk and Q&A with local horticulturalist Debbie Hinchey on **"Germinating Native Seeds: Inhibitors and Solutions"**
- **Free handouts & books for sale on growing native plants**
- Network with other native plant growers!

Requirements: Seed requests must be submitted by Nov. 30 at https://bit.ly/native_seed_form.

Can't attend the Dec. 2 seed pickup? You may request seed through our mail distribution program which will begin on the first of the year.

2023 Alaska Native Plant Seed List

Be sure to read submittal requirements at https://bit.ly/native_seed_form

Scientific Name	Common Name	Note	Location	Wild / Cultivated?
Aconitum delphiinifolium	Monkshood, Larkspurleaf	All parts poisonous except to native pollinators; Handle with care	MOA	wild
Aconitum delphiinifolium	Larkspurleaf Monkshood, Monkshood	All parts poisonous except to native pollinators; Handle with care	MOA	cultivated
Aquilegia formosa	Western Columbine	Prefers part shade/shade, moist areas	Turnagain Pass	wild
Aquilegia formosa	Columbine, Western	Prefers part shade/shade, moist areas	MOA	mixed
Argentina (Potentilla) anserina	Silverweed		MOA	wild
Aster sibiricus	Siberian Aster		MOA-CCSC	cultivated
Artemisia tilesii	Stinkwood, Wormwood	Medicinal	Kenai	wild
Aster sibiricus	Siberian Aster		Turnagain Pass	wild
Aster sibiricus	Siberian Aster		MOA	cultivated
Caltha leptosepala	White Marsh Marigold	Requires consistently moist soil	KPB-Turnagain Pass	wild
Caltha leptosepala	White Marsh Marigold	Requires consistently moist soil	?	?
Caltha palustris	Marsh Marigold		MOA	?
Campanula rotundifolia	Common Harebell	Long bloom time, flowers resemble creeping bellflower but stems very different	MOA	cultivated
Campanula rotundifolia	Common Harebell	Long bloom time, flowers resemble creeping bellflower but stems very different	MOA	cultivated
Chamerion angustifolium	Fireweed		MSB-Palmer	wild
Dryas drummondii	Yellow Mountain Avens		Mat-Su (SM)	wild
Dryas ajanensis (octopela)	Eight-petal Mountain-Avens		MOA	wild
Erigeron compositus	Cut-Leaf Fleabane		MOA	cultivated
Erigeron spp. (likely peregrinus)	Wandering Daisy		Turnagain Pass	wild
Erythranthe guttata	Seep Monkeyflower, Wild Mimulus	Easy to propagate, reseeds prolifically	MOA	cultivated
Fritillaria camschatcensis	Chocolate Lily, Rice Lily	Use fresh seeds less than 1 year old.	Turnagain Pass	wild
Fritillaria camschatcensis	Chocolate Lily, Rice Lily	Use fresh seeds less than 1 year old.	MOA	wild
Fritillaria camschatcensis	Chocolate Lily, Rice Lily	Use fresh seeds less than 1 year old.	MOA	cultivated
Galium triflorum	Fragrant bed-straw	Can be used to make vanilla substitute	Turnagain Pass	wild
Geum macrophylium	Large-leaved Avens		KPB-Resurrection Creek	wild
Geum rossi	Ross' avens		MOA	wild
Hedysarum alpinum	Alpine sweet-vetch	Reseeds prolifically	MOA	cultivated
Heuchera glabra	Alpine heuchera		MOA-Byron Glacier	wild
Impatiens noli-tangere	Touch-Me-Not Balsam	Reseeds prolifically	MOA	cultivated
Iris setosa	Beach-head Iris, Wild Iris	Can take 2 years to germinate	MOA-CCSC	cultivated
Iris setosa	Beach-head Iris, Wild Iris	Can take 2 years to germinate	MSB-Eklutna	wild
Iris setosa	Beach-head Iris, Wild Iris	Can take 2 years to germinate	MOA	?
Lupinus nootkatensis	Nootka Lupine		MOA	wild

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Papavar alboreseum	Pale Poppy, Portage Poppy		MOA	cultivated
Papavar alboreseum	Poppy, Portage, Pale		MOA	cultivated
Papaver alaskanum	Poppy, Alaska		MOA	cultivated
Pilosella tristis	Alpine hawkweed		Turnagain Pass	wild
Polemonium acutiflorum	Tall Jacob's Ladder		MOA-CCSC	cultivated
Potentilla nivea	Snow Cinquefoil	Grows prolifically at Campbell Creek Science Center	MOA	cultivated
Potentilla (Comarum) palustris	Purple marsh cinquefoil		MSB	wild
Primula pauciflora (Dodecatheon pulchellum)	Dark-Throated Shooting Star		MOA	cultivated
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Primula pauciflora (Dodecatheon pulchellum)	Dark-Throated Shooting Star		MOA	cultivated
Rhinanthus minor	Rattlebox, Yellow Rattle		MOA	cultivated
Rhinanthus minor	Rattlebox, Yellow Rattle		MSB	wild
Sanguisorba candadensis	Canadian Burnet		Turnagain Pass	wild
Scheuchzena palustris	Rannoch Rush		?	?
Senecio triangularis	Arrowleaf Senecio		Turnagain Pass	wild
Sisyrinchium montanum	Strict Blue Eyed Grass	Requires full sun to bloom	MOA	cultivated
Solidago multiradiata	Northern Goldenrod		MOA	wild
Solidago multiradiata	Northern Goldenrod		MOA	wild
Spiraea stevenii	Steven's Spirea		KPB-Turnagain Pass	wild
Swertia perennis	Star Gentian, Felwort, Star Swertia	Requires consistently moist soil	Turnagain Pass	wild
Thalictrum sparsiflorum	Few Flower Meadow-Rue, Western Meadow Rue		Turnagain Pass	wild

For More Information:

Seed list for in person event:
https://bit.ly/native_seed_list

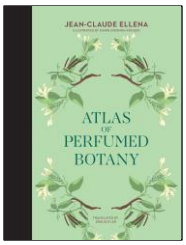
Google form for in person event December 2, 2023
https://bit.ly/native_seed_form

Ordering Seeds By Mail:

Details for ordering seeds by mail will be provided through e-mail and Facebook in January 2024. All seeds listed above will still be available.

Santa's Native Seed Packet Preparing Elves - 2023

From Our Bookshelves – Gift Books For Green Fingers



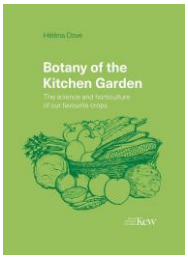
Atlas of Perfumed Botany

Author: Jean-Claude Ellena; Illustrator: Karin Doering-Froger; Translated by Eric Butler
MIT Press April 5, 2022
ISBN-10 : 0262046733

A cartography of fragrance that charts the botany and geography of perfume composition.

For perfume makers, each smell carries with it a multitude of associations and impressions that must be carefully analyzed and understood before the sum of all its parts emerges. All perfumers have their own idiosyncratic methods, drawn from their individual olfactory experiences, for classifying fragrances. In *Atlas of Perfumed Botany*, virtuoso perfumer Jean-Claude Ellena leads readers on a poetic, geographic, and botanical journey of perfume discovery. Ellena offers a varied and fascinating cartography of fragrances, tracing historical connections and cultural exchanges. Full-page entries on plants ranging from bergamot to lavender are accompanied by detailed and vivid full-color botanical illustrations.

Jean-Claude Ellena, the "nose" of the luxury brand Hermès for fourteen years, has been the Creative Director of Fragrance at the perfume house Le Couvent since 2019. Karin Doering-Froger, a faculty member at the Atelier de Sèvres, has illustrated many novels and travel guides, including *Atlas de cités perdues* and *Atlas de contrées rêvées*.



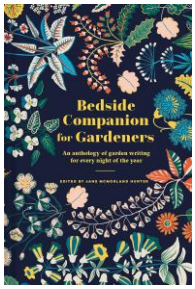
Botany of the Kitchen Garden

Author: Helena Dove
Royal Botanic Gardens, Kew; September 8, 2023
ISBN-10: 1842467832

People have been growing fruits and vegetables in domesticated spaces for centuries. In *Botany of the Kitchen Garden*, Hélèna Dove expertly combines horticulture and science to demonstrate that by examining the botany of plants we can understand plants' behaviors and adaptations, giving readers and growers the tools to delve further into their favorite foods.

From asparagus, cabbage, lettuce, and raspberry to pineapple, tomatillo, and okra, each plant entry includes information on etymology, cultivation history, growing habits, varieties, and much more. By giving readers a closer look at the everyday crops we grow and eat, this book will help them cultivate more productive plots, develop a renewed zest for the food on our plates, and gain a deeper understanding of all the aspects of the history and science of their gardens.

Helena Dove is an experienced Kitchen Gardener, currently based at the Royal Botanic Gardens, Kew. There she manages an organically run Kitchen Garden with a wide variety of fruit and vegetables. Previously managing the historic Edwardian Kitchen Garden at Myddelton House Gardens in Enfield, she has a passion for heritage and interesting crops. Helena writes a monthly blog for the Kew website, and has featured articles for magazines such as Plant Heritage and guest pieces for the Global Food Security Program.



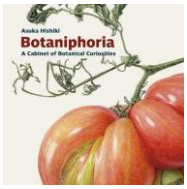
The Bedside Companion for Gardeners: An Anthology Of Garden Writing For Every Night Of The Year

Edited by Jane McMorland Hunter
Batsford Press: 2021
ISBN-10 : 1849947139

A mix of fact and fiction, fantasy and experience, the *Bedside Companion for Gardeners* is a treasure trove of green-fingered inspiration where practical advice blends seamlessly with poetry and prose from intrepid gardeners past and present. Dip in and out of this collection with an entry for every night of the year that draws on writing through the ages and from across the globe and makes perfect under-the-duvet reading for weary gardeners.

The *Bedside Companion for Gardeners* incorporates practical advice from the 17th-century gardening diarist John Evelyn; inspiring prose from Elizabeth von Arnim and John Milton; astute commentary from Horace Walpole on William Kent and Nancy Mitford on the vulgarity of a Surrey garden. Kipling offers practical advice, while Tennyson waxes lyrical on an Arabian night garden. Compare Mrs Earle and Ethel Case's advice on building a bird table, from their 1912 book, *Gardening for the Ignorant* ("A long fir pole is the principal thing needed…") with the extract from Gertrude Jekyll's 1899 classic and influential book, *Wood and Garden* ("There is always in February one day, at least, when one smells the yet distant, but surely coming, summer…") and you get an idea of this pleasing piece of horticultural literature.

The perfect gift for any gardener, this magical book is an invaluable source of inspiration and guidance to revisit throughout the year.



Botaniphoria: A Cabinet of Botanical Curiosities (Botanical Art Portfolios) January 1, 2023
Author: Asuka Hishiki
Two Rivers Press; January 2023

Take a fresh look at the world through the lens of a self-confessed nature-obsessed artist. Asuka Hishiki possesses not only a sense of profound awe and wonder at the intricacies of the natural world, but also the talent to communicate it through her paintings. Recalling the Wunderkammer (literally, 'wonder rooms') of 16th and 17th century European collectors, Asuka Hishiki's ***Botaniphoria*** encompasses subjects as diverse as rotting vegetables, endangered species, mundane weeds and backyard insects – all treasures to her and transformed into objects of intense and fragile beauty through her skill with watercolor. Her work is held in prestigious collections such as The Huntington Library, Art Museum and Botanical Gardens, California, the Royal Botanic Gardens, Kew and the Hunt Institute for Botanical Documentation, Pennsylvania.

One of the first people to appreciate her work said about it, 'your work is not to hang upon a wall in a bright living room, but to put in a drawer in the study. Then, alone in the middle of the night, to take out and ponder upon.' In the best traditions of Wunderkammer, this book is an artfully arranged collection intended to be pondered upon. From the interactions of the objects within the paintings, to the quirky choice of subjects and the realism with which they are portrayed, they will bear revisiting again and again. As Asuka admits, painting is her language. She is an extremely adept communicator in it.

Portrait of An Heirloom Tomato

From What We Gather

Sunflowers Really Do Have Solar Clocks

An internal circadian clock controls the distinctive concentric rings of flowering in sunflowers, maximizing visits from pollinators, a new study from plant biologists at the University of California, Davis, shows. The work is published Jan. 13 in eLife. https://elifesciences.org/articles/80984

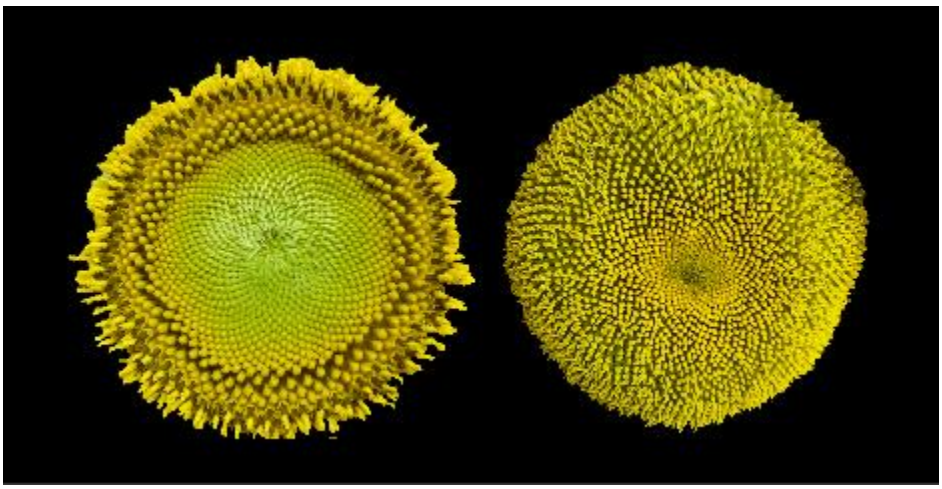
A sunflower head is made up of hundreds of tiny florets. Because of the way sunflowers grow, the youngest florets are in the center of the flower face and the most mature at the edges, forming a distinctive spiral pattern from the center to the edge. An individual floret blooms over a couple of days: on the first day, it opens the male part of the flower and presents pollen; on the second day, the female stigma unfold to receive pollen. Somehow, florets coordinate so that they open in concentric rings starting from the edge and moving inward on successive days, with a ring of female flowers always outside the earlier-stage, pollen-bearing male flowers.

Pollinating bees tend to land on the ray petals around a sunflower head and walk toward the center, said senior author Stacey Harmer, professor of plant biology, UC Davis College of Biological Sciences. That means that they will pick up pollen after they have walked over the female florets, then carry it to a different flower head.

The internal circadian clock of a plant or animal runs on a cycle of about 24 hours, allowing different genes to be activated at different times of day. Natural day/night cycles keep this internal clock synchronized to actual day time. Changing the length of daylight, or darkness, can reset the clock. In sunflowers, continuous light disrupts the clock entirely.

Time-lapse video

The researchers took time-lapse videos of sunflowers grown in different light/dark or temperature conditions. They found that the plant's circadian clock controls the opening of florets. When the clock was disrupted by growing plants in continuous light, florets did not open in concentric rings, but only by age, starting at the edge and moving to the center in a continuous gradient.



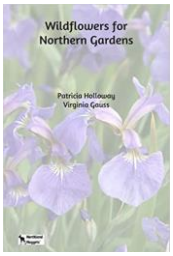
At left is a sunflower head grown under normal conditions. Florets mature in concentric rings day by day. The flower head at right was grown with a disrupted circadian clock and its florets did not open in the correct pattern. (Harmer lab, UC Davis)

When plants that had been grown with a disrupted clock were moved outside, they attracted fewer pollinators than normal sunflowers. "We think that being able to coordinate in this way makes them a better target for bees," Harmer said. "It's a strategy to attract as many insects as possible."

Dr. Patricia Holloway achieves a Triple Crown – At least!

She has been the recipient of numerous awards during her lifetime, but she is the first person – man or woman – to have achieved the trifecta of awards including the Usibelli Distinguished Service Award, the Alaska Innovators Hall of Fame award, and now the prestigious Alaska Native Plant Society Lifetime Achievement Award!

For her many contributions to public research and education on the propagation of native plants, we are pleased to honor Dr. Patricia Holloway, professor emerita at the University of Alaska Fairbanks, as only the second person to yet receive our ANPS Lifetime Achievement Award.



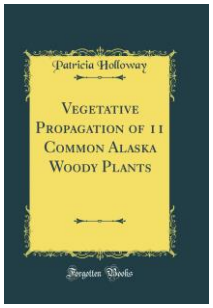
Pat is a long-time Alaskan who has conducted horticultural research in Alaska for decades and was one of the founders of the Georgeson Botanical Garden in Fairbanks, which she directed for many years. She has taught classes, given lectures, and published original research related to propagating native plants. Recently, Pat published a wonderful book (available on Amazon.com) on how to propagate native wildflowers, and she has donated the proceeds from its sales to our non-profit. She has also spent many hours as a volunteer helping to develop educational materials on native plants ahead of our first Alaska Native Plant Month in May.

She began her association with the university in 1975 as a research aide at the Agricultural Experiment Station. She worked for three years in the horticulture program before earning a doctorate in horticulture at the University of Minnesota in 1982. Her dissertation was on lingonberries, and she continues her research interest in Alaska wild and cultivated berries. You can read many of her native plant research reports at: https://georgesonbotanicalgarden.org/research/ .

An early innovative accomplishment was transforming research plots at the Fairbanks Experiment Farm into one of the most-visited campus attractions and a center for horticultural research, outreach, and education. Holloway, colleagues, and many volunteers began the Georgeson Botanical Garden in 1989, and it is now a valuable community and University asset. It is the center for horticultural crop trials, peony research, plant hardiness trials, educational programs, a children's garden, as well as public concerts and events.

She has received many awards for her work, including a 2015 Usibelli Distinguished Service Award and she was the first recipient of the Growers Cup Award from the Alaska Peony Growers Association. In 2018 she was inducted into the Alaska Innovators Hall of Fame for being the first to realize the potential for a commercial peony industry in Alaska and for her work developing the Georgeson Botanical Garden.

We look forward to her sharing many more years of her Alaskan horticultural knowledge and research. We know she won't rest on her laurels!



Pat Holloway received a Lifetime Achievement Award from the Alaska Native Plant Society on November 11, 2023, when she came to Anchorage to attend a Food Policy Conference & Festival.

Photo generously provided by Donna Dewhurst

ANNUAL MEMBERSHIP APPLICATION/RENEWAL

The Alaska Native Plant Society was organized in 1982 by an enthusiastic group of amateur and professional botanists. It is a non-profit educational organization with the goal of uniting all persons interested in the flora of Alaska. Membership is open to any interested individual or organization. If you wish to join us or to renew, you can either use our convenient on-line method by going to https://aknps.org/membership, or fill in the form below, and mail it with the appropriate remittance to:

Alaska Native Plant Society
P. O. Box 141613
Anchorage, AK 99514

STATUS ☐ **NEW** ☐ **RENEWAL**

CATEGORY	E-Mail Newsletter	Snail-Mail Newsletter	Both Mail Deliveries
☐ **Full-time Student**	**$12**	**$22**	**$22**
☐ **Senior Citizen**	**$12**	**$22**	**$22**
☐ **Individual**	**$15**	**$25**	**$25**
☐ **Family**	**$20**	**$30**	**$30**

Name: _____

Address:_____

City _____**State:** _____**Zip:**_____

Telephone: (Home)_____**(Cell)**_____**E-mail**_____

PLEASE RENEW OR JOIN TODAY!
ANPS Membership is on a calendar-year basis, unless you are on recurring payment.
Join now for 2024!

December and January Meetings Via Zoom Only
Meeting ID: 938 2833 2935; Passcode: 362610

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