

# Borealis

the newsletter of the



PO Box 141613, Anchorage, Alaska

SEPTEMBER 1999

## JOIN US AT OUR ANNUAL POTLUCK

Monday, October 4<sup>th</sup> 6:30 p.m.  
at the Campbell Creek Center  
off 68<sup>th</sup> and Lake Otis  
(See Map on Back)

### "Share, Show & Tell"

Bring a dish to serve four times  
the number in your party. We'll  
provide drinks and tableware.  
Bring up to 10 slides of summer  
activities, native plants.

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## SAVE THOSE SEEDS!!

It is not too late to be collecting seeds  
from the wild or from your garden.  
Use the information in this month's  
newsletter and collect some seeds to  
grow and to share.

Every year the Alaska Native Plant  
Society sells native plant seeds that  
have been collected by members  
during the year. Label your  
seed packages and send it to Verna  
Pratt. All donors will get first choice  
from the club's seed list. You'll be  
able to purchase seeds at the regular  
monthly meetings this winter or you  
can mail order them. The price is  
\$.50/package.

## Save Those Seeds!

I haven't counted them, but the authorities<sup>1</sup> tell me that a single seed pod from a columbine plant will yield approximately 100 seeds! Multiply that by 50 pods on a plant and you've got yourself a columbine plantation! Even if you have less grandiose plans, collecting seeds from native plants can provide you with years of future perennial beauty. And it will give you something to swap with other members in the Seed Swap! The Alaska Cooperative Extension (279-5582) has detailed information on saving native seeds. Here are a few tips gathered from their factsheets:

### 1. Timing

Know the life cycle of the plants you are interested in collecting. The timing of seed collection must coincide with seed maturity. Many species have seed maturity patterns that last for many days or weeks, whereas others mature at one time. The arctic lupine (*Lupinus arcticus*) has a raceme on which seed pods mature from the bottom up. By the time the topmost pod has matured, the lowermost pods have shattered, scattering seeds everywhere. The wild geranium (*Geranium erianthum*) also has a similar explosive seed dispersal mechanism.

### 2. Collecting

Only fleshy fruits such as berries should be collected into plastic bags. All other fruits and seeds should be collected into paper bags. Large seeds such as wild iris (*Iris setosa*) may be separated from the capsule at the time of collection, but for many small-seeded plants, it is easier to collect entire fruits or fruiting stalks. The more herbaceous material that is collected, the greater is the need to provide good air circulation to prevent rotting. Keep records of species identity, collection date and location, site characteristics (especially soils) evidence of disease or insect damage, and plant health.

### 3. Cleaning

After collecting, fleshy fruits should be frozen, or the seeds should be extracted using a blender. Subsequent seed germination can be influenced by the methods used in processing seeds after harvest. Lingonberry (*Vaccinium vitis-idaea*) seeds germinate readily if sown immediately after extraction from fresh or frozen fruits. Air-dried seeds, however, become dormant and require a period of cool, moist stratification for optimum germination.

Plants with dry fruits should be thoroughly dry before storage. Spread out the fruits, plants, etc. on newspaper or a tray. After the plant material is dried, it may be stored as is, but storage is less bulky if plant materials are threshed. The specific process is determined by the particular seed involves rubbing the plants, fruits, etc. against a screen to dislodge the seeds and remove the trash. Soil sieves, professional seed-cleaning sieves, many kinds of coarse screens or mechanical threshers may be used. A common practice is to use two screens, one with larger openings and one smaller than the seeds. Seeds fall through the large openings, whereas the larger trash remains in the sieve. Seeds are caught in the small screen, while smaller trash falls through.

Cones of spruce and other conifers are air dried on trays then shaken in a box or cone tumbler to dislodge the seeds. If seed extraction is difficult, cones may be soaked in water until they close, then re-dried. Plants with serotinous cones such as lodgepole pine (*Pinus contorta*) require high temperatures up to 170°F in order to extract the seeds from the cones.

After threshing, seeds may be clean enough to sow, or they may require further processing by cleaning and separation. This process varies with the species. For instance, the wings on spruce seed are often rubbed off to

facilitate sowing. Awns on grasses may be removed. Large seed lots are usually processed through an air-screen cleaner that separates seeds by size, shape and density.

### 4. Storage

Most Alaskan native plant seeds require cold, dry storage to maintain optimum viability. The survival in storage is species-specific ranging from a few days for many spring-maturing willow seeds to thousands of years. For short-term storage in a refrigerator (34-40°F), seeds may be stored in plastic bags; in paper packets that are then enclosed in plastic bags; in glassine envelopes; or in metal, glass or plastic jars. Seeds may also be frozen in air-tight and moisture-tight containers for longer-term storage. Seeds of many aquatic species, such as water lily (*Nymphaea tetragona*) cannot tolerate drying. These seeds are best germinated immediately or refrigerated for short periods of time between sheets of moist paper toweling or filter paper.

Once all your seeds are cleaned, dried and stored, all you have to do is wait until spring. Read up on how and when to germinate your seeds. Some perennial seeds need to be frozen first in order for them to break dormancy. Others may require complete darkness or light conditions in order to germinate. Find out what each species likes and dislikes. Then, as winter sets in, let the snow fall. You're ready for next year.

From:

1. *Saving Seeds* by Julie Rentschler, Master Gardener; University of Alaska Fairbanks Cooperative *Tips on Collecting, Processing and Storing Seeds of Alaska Native Plants*, by Dr. Patricia S. Holloway, Associate Professor of Horticulture, Georgeson Botanical Garden, University of Alaska Fairbanks, Agricultural and Forestry



### Look For Columbine (*Aquilegia* species) SEEDS – Or “Look Out For Columbine Seeds!”

“Columbine seeds were highly valued by Missouri River Indians and were an article of trade between tribes. Omahas considered them an aphrodisiac; braves would rub the seeds between their hands and attempt to shake hands with the lady they fancied in order to win her affection. Girls who didn't share the romantic attraction feared the power of this herb. They also believed smelling it could cause a nosebleed.” From *Discovering Wild Plants: Alaska Western Canada, the Northwest*, by Janice Schofield, Alaska Northwest Books, 1989

# Wildflower Meadows For Alaska

Most commercial wildflower mixes contain a lot of annuals that will not reseed in our short season and perennials that are not hardy here. A very common occurrence is for the colorful flowers to disappear after one or two years leaving a few hardy flowers such as yarrow and ox-eye daisies to take over. Some wildflower mixes from not-so-reputable seed companies contain weed seeds that have never been seen before in Alaska. Many give the false impression that gardeners can throw a few seeds out into their back yard and expect an instant bonanza of color.

A challenge for Alaska gardeners interested in starting a wildflower meadow is the limited availability of true Alaska wildflower seeds. The commercial wildflower businesses in Alaska do not market bulk packages of native wildflower seeds for large meadows. Seeds often are collected from the wild, making seed prices very high. Many Alaska wildflowers also have complex seed germination requirements that prevent germination for one or more years.

So what's an Alaska gardener to do? The commercial wildflower mixes are not reliably hardy, and Alaska wildflowers are available only in small quantities. The logical answer is to combine them. Purchase a commercial wildflower mix with the understanding that the brilliant colors will last only a few years. Plan to renovate and replant at least every three years to keep the brilliant colors. OR supplement the nonnative wildflower mixes with as many Alaska wildflowers as possible. As the nonnative wildflowers die out, the Alaska wildflowers should become established, thus extending the life of your wildflower meadow. If Alaska wildflowers are added, do not sow the commercial mixes as thickly as recommended on the package in order to prevent the Alaska wildflowers from being out-competed by the more aggressive ones. Sow seeds in the fall for best germination and wildflower establishment. Collect or purchase as many Alaska wildflower seeds as possible; combine with non native mixes and sow together. Use the table below to choose the best combinations.

## Non-native wildflowers that should survive or self sow for more than one season. Most eventually die out over time:

Alyssum (*Alyssum maritimum*)  
Baby blue-eyes (*Nemophila menziesii*)  
Baby's breath (*Gypsophila muralis*)  
Black-eyed Susan (*Rudbeckia hirta*)

Condensed from an article by Dr Patricia S. Holloway and Ms. Ouina Rutledge; Georgeson Botanical Notes No. 30 1998; Georgeson Botanical Garden, University of Alaska Fairbanks, Agricultural and Forestry Experiment Station

California poppy, annual (*Eschscholzia californica*)  
Chinese forget-me-not (*Cynoglossum amabile*)  
Dame's Rocket, biennial (*Hesperis matronalis*)  
Icelandic poppy, annual (*Papaver nudicaule*) best if fall sown  
Ox-eye daisies (*Chrysanthemum leucanthemum*)  
Pot marigold, annual (*Calendula officinalis*)  
Rocky Mountain Penstemon (*Penstemon strictus*)  
Sneezeweed (*Achillea ptarmica*)

## Recommended Alaska native plants for meadows

Arctic Lupine (*Lupinus arcticus*)  
Arnica (*Arnica alpina*, *A. latifolia*, *A. lessengii*)  
Beautiful Jacob's Ladder (*Polemonium pulcherrimum*)  
Bedstraw (*Galium boreale*)  
Blue flax (*Linum perenne*)  
Eskimo potato (*Hedysarum alpinum*)  
Fleabane (*Erigeron glabellus*)  
Fireweed (*Epilobium angustifolium*)  
Glaucous bluegrass (*Poa glauca*)  
Goldenrod (*Solidago multiradiata*)  
Great burnet (*Sanguisorba officinalis*)  
Harlequin flower (*Cordalis sempervirens*)  
Jacob's ladder (*Polemonium acutiflorum*)  
Nootka lupine (*Lupinus nootkatensis*)  
Siberian aster (*Aster sibiricus*)  
Strawberry spinach (*Chenopodium capitatum*)  
Wild chamomile (*Tripleurospermum inoratum*)  
Wild iris (*Iris setosa*)  
Wild larkspur (*Delphinium glaucum*)  
Wild sweet pea (*Hedysarum mackenzii*)  
Yarrow (*Achillea borealis*, *A. millefolium*)  
Yellow hawkweed (*Hieracium scabriusculum*)  
Yellow oxytrope (*Oxytropis campestris*)

## Non-native wildflowers in mixes that may not re-seed:

Alyssum (*Alyssum saxatile*)  
Corn poppy (*Papaver rhoeas*)  
Cornflower (*Centaurea cyaneus*)  
Evening Primrose (*Oenothera lamarckiana*)  
Globe gilia (*Gilia capitatum*)  
Godetia (*Godetia amoena*)  
Scarlet Flax (*Linum rubrum*)  
Siberian wallflower (*Cheiranthus allionnii*)  
Tansy bluebells (*Phacelia tanacetifolia*)

## Plants to avoid (too aggressive)

All spreading grasses such as:  
Brome grass (*Bromus inermis*)  
Bluegrass (*Poa pratensis*)  
Red fescue (*Festuca rubra*)  
Alsike clover (*Trifolium hybridum*)  
Butter n'eggs, wild snapgragon (*Linaria vulgaris*)  
White clover (*Trifolium repens*)

**ALASKA NATIVE PLANT SOCIETY**

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**Newsletter ("Borealis")**

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**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, please indicate the category of membership you desire, 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

- Full-time Student \$ 5
- Senior Citizen \$10
- Individual \$12
- Family \$18
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**Membership is on a calendar year basis.**

**Alaska Native Plant Society  
P.O. Box 141613  
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