GEORGESON BOTANICAL GARDEN

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Growing Alaska Native Pasqueflowers

by
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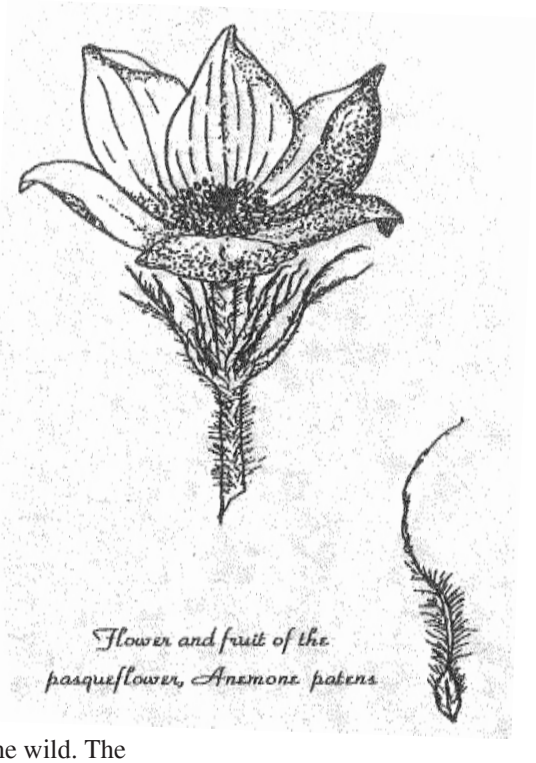
One of the first flowers to bloom in interior, Alaska is the native pasqueflower or wild crocus, *Anemone (Pulsatilla) patens* (Buttercup family). This species grows throughout northern North America from the Arctic south to Washington, Utah, Texas and New Mexico and east to Michigan. It is so abundant in the prairies of South Dakota that it is their official state flower. In Alaska, it grows in arctic and alpine tundra, throughout the Interior, and eastward through most of Yukon Territory to the Mackenzie River. Near Fairbanks, it is most abundant on dry, rocky outcrops or sandy soils along rivers.

This species adapts well to gardens. Most Fairbanksans are familiar with the spectacular display of lavender flowers with golden stamens that grace the gardens of the former Earp house on Cowles Street. Many gardens in the older part of Fairbanks have a small patch of pasqueflowers that bloom in May. Occasionally, plants will bloom again in late summer. The urn-shaped blue to lavender (occasionally white) flowers appear before the dissected leaves emerge from a crowded crown. Shortly after flowering, large, puffy seed clusters develop that consist of a hairy plume attached to a single-seeded achene or fruit. They persist throughout most of the summer. Seeds are ripe from late July to early August in the Fairbanks area.



Not only does this flower provide spectacular color in spring gardens, Gwichin Athabaskan Indians from the Fort Yukon area harvest the fresh or dried leaves of *kii choodaii* and burn them in a smudge to repel mosquitoes. Petals are occasionally used in jam-making by boiling them in a water and sugar solution until the color fades, then adding a commercial source of pectin.

This plant has been cultivated as an ornamental for many years. It is a choice rock garden plant and also adapts well to border plantings and dry roadside slopes. It grows best in sunny locations, but can also tolerate partial shade as long as the site receives full sun for part of the day. Good drainage is important, and established plants are very drought tolerant.

The plants may be propagated by division in early spring or root cuttings in late summer. Because of their extensive root system and the character of their habitat (dry, rocky soils) plants usually do not transplant well from the wild. The easiest method of propagation is by seed. The balls of seeds may be harvested in early August, stored in a plastic bag and refrigerated until needed. Seeds in my collection are still more than 70% viable after 5 years of storage in the refrigerator. Some gardeners recommend removing the hairy plume before sowing, but this is unnecessary. In fact, I prefer using the plume as a handle for planting the seeds.

Seeds may be sown directly in the garden and covered lightly with soil. Water well until seeds germinate. Indoors, use any commercial seed starting mix. Hold the seed by the plume and insert the seed 1/4 inch into the medium. Water well, and do not allow the mix to dry out. Seeds germinate in 3-5 days at room temperature. After 3-4 weeks, transfer seedlings to a sterile potting mix with good drainage. Fertilize with a complete fertilizer that contains at least 100 ppm nitrogen and 200 ppm phosphorus and up to 100 ppm potassium. A complete liquid houseplant fertilizer that has a N:P:K ratio of about 1:2:1 will work. Follow the mixing directions on the package. Growth is slow after germination, but seedlings should be large enough to transplant after 5 months.

Seeds sown with the plume sticking upright in the container can be quite interesting to observe, especially for young children. Whenever the plume is wet it rotates in a circle like a tiny helicopter. An entire flat sown with pasquflower seeds appears to be in motion after it has been watered. It is believed that this rotating motion is a survival mechanism for seeds germinating in the wild. When sufficient moisture is available, the seed is pulled into the soil by the rotating plume, thus positioning the seed in an optimum soil environment for seedling growth and survival.

Once transplanted, the seedlings grow slowly but could bloom as early as the first season. They grow best in well-drained sandy or loam soils with a pH around 6 - 6.5. Space plants 12 inches or more apart depending on the desired effect. The flower display gets better every year.

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