

Vernal Pools & Seasonal Wetlands



Here for a limited time only!

WRITTEN BY
JUNIPER ENGLISH

Juniper is a science communicator and lifelong naturalist living in Victoria BC, the traditional territory of the lək̓ʷəŋən peoples; the Songhees, Esquimalt and WSÁNEĆ whose historical relationships with the land continue to this day.

The term *vernal* means “relating to spring”. Vernal pools are low areas, often on rock or clay, that temporarily fill with rainwater.

In spring, these special aquatic habitats host a variety of plants and animals before drying up under the summer sun.

Other seasonal wetlands also grow and shrink throughout the year, but may not disappear as completely as the vernal pools.

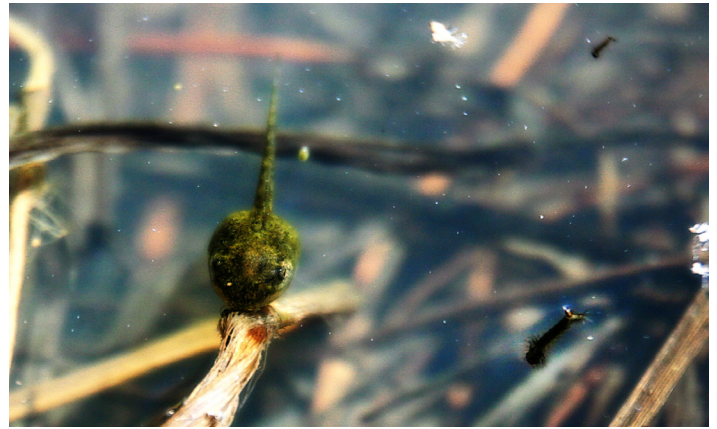
In BC, vernal pools are largely limited to the South Coast, Vancouver Island, and the Gulf Islands but also occur in the dry southern interior. Vernal pools and seasonal wetlands contribute significantly to biodiversity. On the South Coast, they form a part of the rich Garry oak ecosystem, found nowhere else in Canada.

A habitat of extremes

Vernal pools are home to a unique set of plants that can tolerate extreme wet and dry conditions. Many species are semi-aquatic annuals which sprout and grow during the wet winter phase. These winter-growing plants flower and fruit from early to late spring.

Other species less tolerant of wet conditions sprout during the spring. These fast-growing plants are in a race against time to mature and make seeds for the next generation before the pool dries up in summer. After that, all these plant species are only present as dormant seeds in the soil, waiting for the rains.

Because these plants grow in a unique habitat, within a small ecosystem – made even smaller by human development, many of these plants are rare and are considered endangered in Canada.



A tadpole (left) and mosquito larvae (right) have a place to grow in a temporary pool.

Plants of seasonal wetlands



Bog birds-foot trefoil
(*Lotus pinnatus*)



Tall woolly-heads
(*Psilocarphus elatior*)



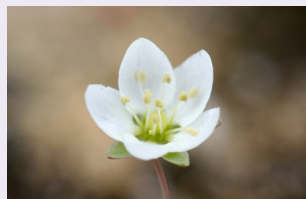
Water-plantain buttercup
(*Ranunculus alismifolius*)



Kellogg's rush
(*Juncus kelloggii*)



Rosy owl-clover
(*Orthocarpus bracteosus*)



Dwarf sandwort
(*Minuartia pusilla*)

A safe but temporary home

Because they dry up, one of the characteristics of seasonal wetlands is that they do not contain fish. This means less predators for the amphibians, insects, and arthropods who use the temporary wetlands to begin their lifecycles. Their eggs, tadpoles, and larvae have the pools to themselves.

When the frogs, toads, salamanders, mosquitoes, damselflies, and others inhabitants have grown into their adult forms, they'll leave the shrinking pool and move into the surrounding habitat to continue their lives.

Caring for seasonal wetlands

The best time to view vernal pools is naturally in the spring, however these ephemeral ecosystems need to be appreciated year-round. Vernal pools are often damaged or destroyed because of human activity.

- It is important to protect areas with seasonal wetlands. Pools are often filled with soil or drained for development.
- In seasonal wetland areas, stay on trails to prevent habitat from being trampled by people and pets.
- You can help protect vernal pools by noting where they are found so you don't disrupt them when the dry season comes.