A Landscape that Depends On Fire

KEEPING THE PRAIRIE ALIVE

When ice age glaciers receded, trees and other plants slowly returned to this landscape. South Puget Sound prairies began to form about 10,000 years ago as the climate grew warmer and drier. Drought-tolerant grasses, flowers and oak trees flourished wherever glaciers had deposited gravelly, well-drained soil. About 7,000 to 5,000 years ago, the climate became cooler and wetter, supporting evergreen trees. Indian tribes began burning the prairies to keep woody trees and shrubs from overtaking the prairie plants they used for food and medicine. Fires kept the prairies open for travel and created habitat for wild game animals.


Trees invading mounded prairies


Controlled use of fires helps to maintain the prairies.


Douglas-fir
Pseudotsuga menziesii


Oregon white oak
Quercus garryana


Camas
Camassia quamash

Today, active management, mowing and controlled fires keep surrounding forests from encroaching on prairies.

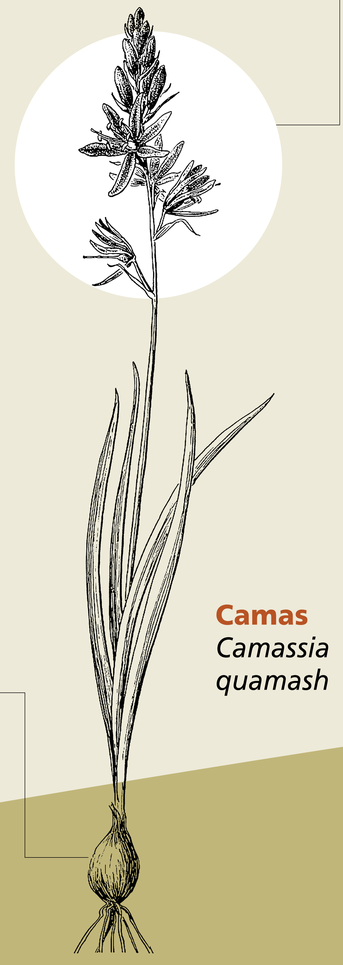
Adaptations to Fire

Douglas-fir trees shade out prairie plants. Thick bark on mature trees helps protect them from low grass fires, but young trees and dense forests often don't survive fire.

Oregon white oak trees are part of the prairie ecosystem and reproduce best by stump sprouts and root suckers. New stands are quickly re-established after fire.

Prairies are covered with flowers following fires. These plants have adapted to fire by:

- Blooming early
- Reproducing by underground buds (geophytes)
- Having seeds that germinate after fires
- Having deep roots (perennials and bulbs)



Camas
Camassia quamash

TREES INVADING PRAIRIE PHOTO BY DR. VICTOR B. SCHEFFER. CAMAS ILLUSTRATION FROM VASCULAR PLANTS OF THE PACIFIC NORTHWEST BY HITCHCOCK, ET AL.