FIA–FSP Forest Science Corner

Saskatoon/Scaqʷm: A shrub for all seasons

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Mike Keefer photo

The Saskatoon is nature's bountiful gift to bears, birds, and humans.

The Saskatoon (*Amelanchier alnifolia*) is a common shrub that brightens up the hills when it blooms in the spring and can provide abundant berries in the summer. Popular for berry picking, bear food, as well as for wildlife browse, it appears to be a constant and resilient component of the Southern, Central, and Northern Interior ecosystems of British Columbia. For the Siska Band near Lytton, and for many other First Nation groups, the Saskatoon is a keystone food plant.

Traditionally, the Siska people relied on scaqʷm (Saskatoon), salmon, wild game, and other plant foods for sustenance. But fire suppression and a lack of traditional Nlaka'pamux land management have shifted the ecological balance in the Fraser Canyon area towards a preponderance of dense, closed forest types, which do not support adequate levels of scaqʷm, other plant foods, and wild ungulates. One Siska elder recalled that, when he was a child, he could ride the hills above Siska on horseback, but now "you can only walk like a bear through the dense young forests." The scaqʷm typically persists in these unhealthy forests, but as the tree canopy closes in, fewer berries result. This dense forest cover also poses enhanced fire risks in the hot and windy climate around Lytton. Throughout its range, the Saskatoon is typically most productive following disturbance from fire and logging, as it benefits from full solar radiance. A side benefit of encouraging the scaqʷm is that it has low flammability, making it a desirable species to manage for in urban interface areas.

The Siska Traditions Society (STS) is a non-profit business owned by the Siska community that engages in sustainable non-timber forest product harvesting and processing. The harvesters are all trained and certified by training that encompasses the Nlaka'pamux language and traditions along with modern technology. STS, together with ethnobotanist **Michael Keefer**, have documented traditional scaqʷm and other shrub management and harvesting practices. While conducting their initial research, it became apparent how little information was available for the management of scaqʷm and other plants of interest. With this knowledge, inspiration from MOFR researcher **Evelyn Hamilton**, and funding from the Forest Investment Account–Forest Science Program, the team embarked on research to produce a series of shrub management guidelines that are being published as a joint BC Ministry of Forests and Range/Centre for Non-Timber Resources (Royal Roads University) publication; they should be available in the next 6 months.

Taking the work a step further, Keefer, his research team, and the Siska people have inventoried local plant resources and established an experimental treatment site in an ingrown forest area, with the objective of enhancing scaqʷm productivity. The four treatments to be tested are: slashing, slashing followed by prescribed fire, prescribed fire only, and an untreated control. All treatments will be monitored. Results should inform future ecosystem restoration and fuel reduction projects not only for the Lytton area, but also for the great Saskatoon/scaqʷm domain throughout the rest of British Columbia. A key result of this work is hoped to be the renewal of traditional plant management with assistance from Western science.

Michael Keefer, the project principal, operates a small Cranbrook-based firm, Keefer Ecological Services Ltd (KES) that specializes in sustainability-based research and project implementation with an emphasis on ethnobotany, vegetation mapping, and ecological restoration. KES is currently involved in wild berry productivity mapping and modelling, major revegetation projects in two of BC Hydro's reservoirs that saw the planting of roughly half a million wetland seedlings in 2009, and research in furthering techniques for using native species in ecological restoration.

For further information on this project, consult the website at ***www.bcfsp.com/webRimsProject/_CrossApplicationContent/Pages/AnonymousAccess/FundedRimsProjectsDescription.aspx?ProjectPlanIdPublic=Y093329&ProjectPlanId=550*** *and* ***http://siskatraditions.org***