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Baikal sedge in its sand dune habitat

Collaboration in Action

Working with First Nations in the Yukon to recover Baikal Sedge

Canada's Aboriginal Peoples have long known the value of ecosystems in balance. So when a rare plant called the Baikal Sedge was listed as Threatened under the federal *Species at Risk Act* in 2005, **Kluane National Park and Reserve** – where the largest sedge population in Canada grew – went to local First Nations to ask for help and advice. This was the start of the Baikal Sedge Recovery Team, a team that also included Environment Canada, Yukon Environment, and others who wanted to help support recovery of the sedge and its habitat.

This early and ongoing collaboration between federal and territorial government staff, First Nations staff, local botanists and others created an important foundation for future partnerships in support of the Baikal Sedge and other species at risk. It also serves as a model of how traditional knowledge and science can be incorporated into species at risk recovery efforts.

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Tenacious but at risk

The Baikal Sedge (*Carex sabulosa*) is a perennial plant that grows in the loose, sandy soil of windswept dune systems in the southwest Yukon. The sedge has long horizontal roots called rhizomes. New shoots can grow all along the length of these roots, so a single plant can cover a large area, making it hard to tell where one individual plant ends and another begins.

These tenacious plants, with their deep root systems, thrive where many other plants cannot. At the same time, Baikal Sedge plays a role in stabilizing the dunes and creating an environment where other species – both natural and exotic invasive – can take root, multiply and ultimately compete with them.

The Baikal Sedge is found in active sand dunes, habitats that were created when the glaciers retreated at the end of the last Ice Age. Smaller dunes, where natural processes like wind are absent, have been filling in across the territory since the ice retreated, leading to habitat loss and population declines for species like Baikal Sedge. Other threats to the species include the use of recreational vehicles on the dunes, although this is not a factor in the park.



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Planning in partnership

To figure out the best course of action to safeguard Baikal Sedge and its remaining sand dune habitats in the Yukon, Parks Canada worked with four First Nations whose lands were home to the species – Carcross/Tagish First Nation, Champagne and Aishihik First Nations, Kwanlin Dün First Nation, and Kluane First Nation. Together, they obtained funding to explore Aboriginal traditional knowledge about the sedge and their habitat. As a result, the team learned that while the sedge itself is not extensively used by First Nations, the dune ecosystems in which they live are used as travel and wildlife tracking corridors.

First Nations representatives have participated in all aspects of planning and recovery work to date, including field work to see if there were other similar dunes in the area and to survey them for sedge. First Nation Recovery Team members have also helped share information about the sedge with their communities and leaders, through presentations to Chiefs and Councils, Species at Risk workshops, and discussions with First Nations wildlife management departments. Parks Canada staff were also invited to these presentations, further cementing our relationships and common purpose in species at risk recovery efforts.



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Baikal sedge habitat in Kluane National Park and Reserve



Kluane National Park and Reserve of Canada



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Discovering new populations

One of the goals of the project was to complete Baikal Sedge inventories both within the park and in other dunes inside and outside its range, to assess the health of known populations and identify any additional populations

that might exist. This involved teams of government, First Nations and independent researchers scouring satellite imagery and then travelling – by truck, raft and on foot – to look for dune systems throughout the southwest Yukon.

While this was not without its challenges – including curious grizzly bears and trucks that stalled in the middle of river crossings – the team had considerable success. Not only were researchers able to find a previously unknown population of Baikal Sedge within the park, they also found one just outside of Whitehorse, which opened the door to further collaboration with a fifth First Nation, the Ta'an Kwäch'än.

Moving Forward

Efforts to date have marked an important first step towards recovery of the species and awareness of disappearing dune habitats in the Yukon. But much work remains to better understand and address the threats to the Baikal Sedge, both inside and outside the park.

Nevertheless, the partnerships Parks Canada has forged with First Nations form the basis of a strong shared future. Just as the roots of the sedge anchor the dunes and make them resilient to wind and rain, these relationships create a bedrock of respect and understanding upon which future work – for the Baikal Sedge and other species at risk – can be built. They also demonstrate the value of incorporating both Aboriginal traditional and scientific knowledge into wildlife and landscape management decisions.

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