

Member Initiatives

Canada's (ACC) waste management team. A distant buzzing jolts me from my reverie, developing into a loud clatter as the helicopter turns in a wide arc, two 40 gallon barrels swinging on a line beneath. I don my work gloves and ear protectors, get ready to unhitch the first of many loads and soon the air is redolent with the stomach churning mixture of jet fuel and sewage. Ah wilderness!

Today we are servicing a chain of four mountain huts on the Wapta and Waptuik Icefields, located just to the west of the Icefields Parkway connecting Lake Louise and Jasper in the Canadian Rockies. Propane and firewood is flown in, sewage is flown out. Between unloading and loading flights, silence and sanity returns, and I conjecture, not for the first time: there has to be a better way. Surely there has to be an alternative to using a million dollar piece of machinery burning gasoline at a prodigious rate, and creating enough noise to panic wildlife for miles just to remove bowel movements of back country enthusiasts and keep them warm. It was these musings, nurtured during many subsequent discussions with mountaineers and land managers that provided the genesis for Backcountry Energy Environmental Solutions (BEES).

BEES is a non-profit web-based collaborative dedicated to the procuring and sharing of information on the best technology and practices available for energy, including wood, diesel, propane, micro-hydro, solar and wind, as well as technological solutions for managing potable, grey and black water in remote mountain locations. Potential benefits of the BEES initiative include environmental protection, human health protection, reduction of fossil fuel use and economic savings through reducing duplication and pooling resources and expertise. BEES is supported by the Alpine Club of Canada, Parks Canada, BC Parks and Protected Areas, Backcountry Lodges of British Columbia, WorleyParsons, and the Improved Processes and Parameterisation for Prediction in Cold Regions (IP3) Research Network.

BEES has launched its new website at www.beeshive.org. The website enables BEES to collect and share information about energy, water and wastewater management at recreational facilities in off-grid, mountainous regions. It provides an opportunity for operators of backcountry facilities to communicate and build upon each other's experiences. The website also offers a repository of technological information and provides references to continuously updated research links. The technologies that BEES identifies or develops will have application in mountainous regions around the world.

Providing energy and potable water, and treating grey water and sewage is exceptionally challenging in mountainous backcountry regions. Technologies used at lower elevations don't necessarily work at higher elevations. Alpine and sub-alpine regions are colder, receive heavier snowfall and have shorter hours of sunlight. While making use of technologies such as composting toilets and photovoltaics is challenging, the current practices of flying in propane, flying out sewage, and using diesel generators present their own unique set of challenges and can be hard on delicate alpine environments. There has been little expertise and technological support for operators of remote facilities in the mountains. They have had to rely on ingenuity and trial and error. Mistakes are usually costly, time consuming and potentially damaging for the environment. BEES provides a vehicle to share technological knowledge, identify information gaps and facilitate research where required.

BEES is Up and Flying

BEES



BEES facilitates an information exchange system and establishes communication links between various participants

I climb stiff legged out of the car, the snow squeaking pleasingly under my boots as I walk to the edge of the highway pullout. Stretching my arms skyward I inhale the crisp -20C air and take in the view. The dark bulk of a wall of 10,000 peaks dominates the western horizon. It's still too early to pick out any detail, but slowly a delicate violet hue silhouettes the crenelated ridges, and even as I watch, the rising sun picks out limestone ramparts in a splendid golden alpine glow. Another 30 minutes, and in the words of the Great Bard "jocund day stands tiptoe on the misty mountain tops" and its time for my workday to begin as a volunteer with the Alpine Club of

The real strength of BEES will be in its members. By bringing the stakeholders (technology experts, experienced operators of backcountry facilities, funders) together, by pooling resources and expertise, and by engaging in research when necessary, we will be able to identify or develop functional, economical and environmentally appropriate solutions.

Do you have suggestions, ideas or technical knowledge that you can contribute to BEES? The BEES website includes a forum which members can use to share their own experiences and guide others. Backcountry lodge operators, land managers and energy and waste management experts are encouraged to participate in the forum or contact BEES at beeshive@telus.net

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