

Prospect snowmaking report (2020)



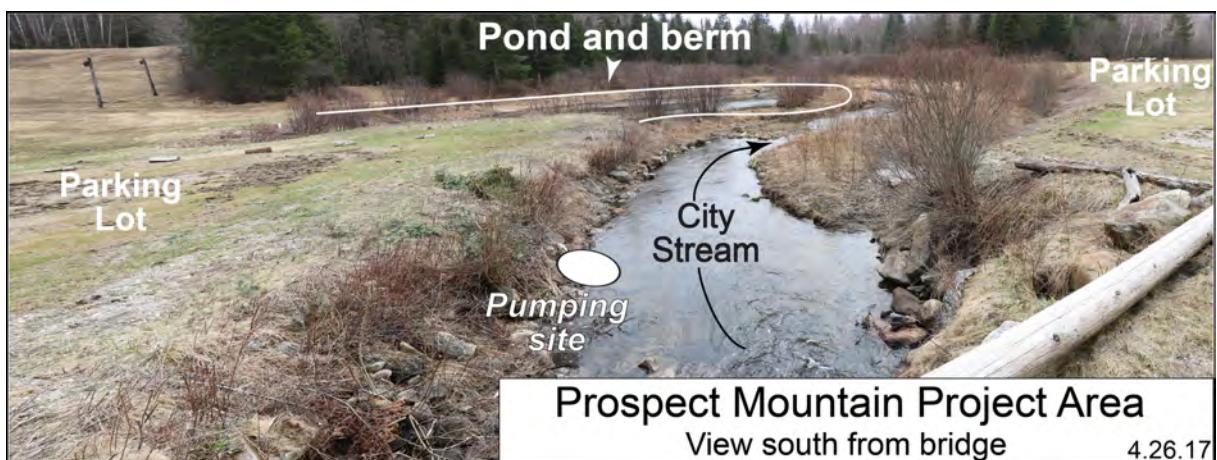
A snowmaking gun loaned by HKD Snowmakers, of Natick, Mass., propels mist into the air during initial snowmaking efforts to enhance trails at Prospect Mountain Nordic Ski Center in Woodford. The new nonprofit ownership group wants to add snowmaking on a permanent basis to extend the winter season and keep trails open during warm spells.
PHOTO PROVIDED

Snowmaking project underway at Prospect Mountain

Posted Wednesday, January 22, 2020 8:21 pm

How did Prospect get started on making snow?

Many mapping, design, permitting, and bidding steps, coordinated by MSK Engineering and Design of Bennington, began the process of renovating the snowmaking pond, first constructed next to City Stream in 1982, when Joe Parks owned Prospect Ski Mountain Corporation.





Beginning the dredging and repair of the snowmaking pond by Barkus Excavating (Readsboro, Vermont) in August 2019. View to southwest from parking lot.



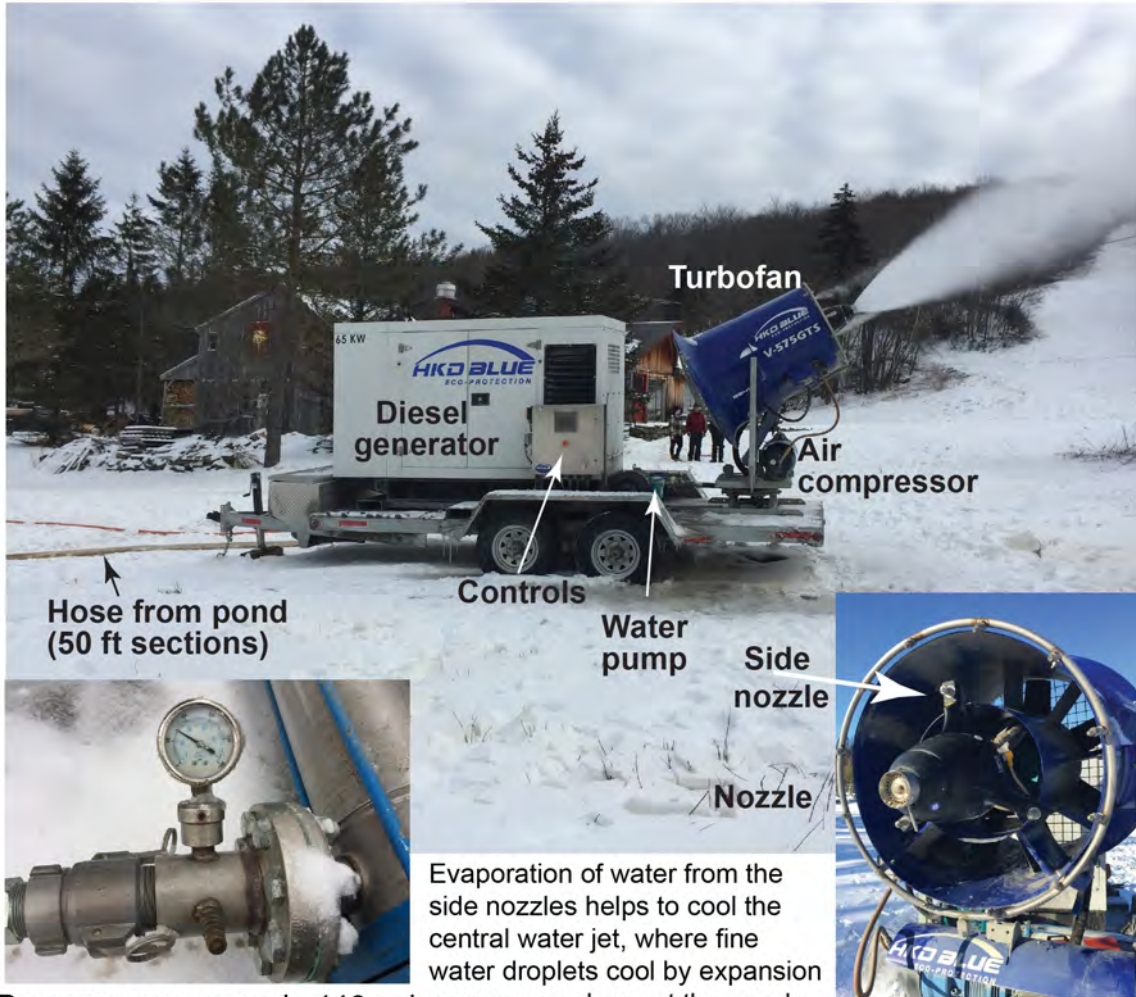
Bank repair and dredging nearly done, September, 2019. Maximum depth 7 ft. Planned capacity 300,000 gallons. View to west-southwest



Finished pond in October 2019. View to the east.

HKD Snowmakers, a Natick (Mass) corporation that "manufactures and supplies energy-efficient snowmaking technology", loaned Prospect a snowmaking system in mid-January 2020 and we rented a generator, pump and 600 feet of hose.

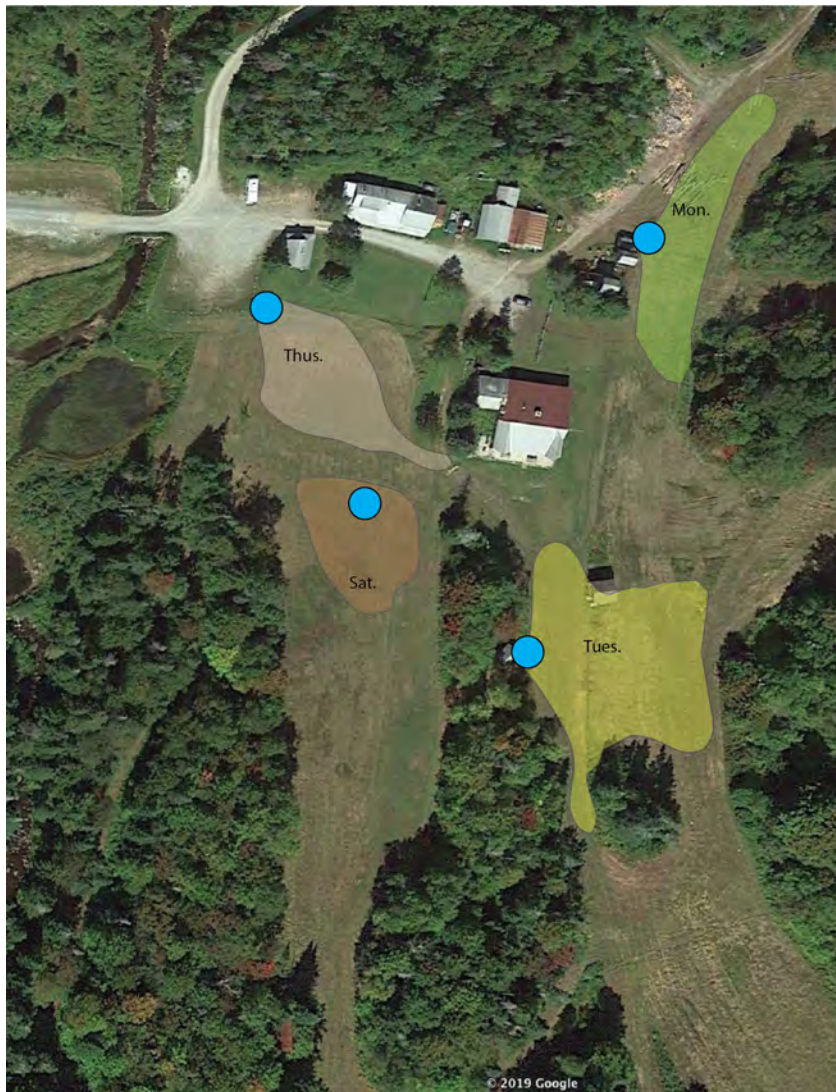
Trailer-mounted snowmaker--weight about 5 tons



Snowmaking pond with covered hole for submersible pump



The good news--We pumped a total of ~ 65000 gallons from the pond during about 20 hours of snowmaking, covering about an acre with a foot of snow in patches that are thickest near where we parked the trailer (blue bullets) at four locations in the stadium.



Where we made snow in January 2020

We used about 175 gallons of diesel fuel to power the two generators. We didn't notice any real effect on pond level. The snow was hard to spread with the groomer, but we made enough in key places to use the stadium area near the base of the mountain for practice and for high school racers from 3 states and BKL racers from southern Vermont. A little natural snow helped! Prospect Mtn had almost no cover in mid-January.

Other news--Since we spent an entire day thawing the pump, hoses and fangun and 2 to 4 hours on other days fueling, thawing, moving the trailer, and rolling and unrolling the hoses and tightening their screw-couplings, we probably spent almost as much time on setup and takedown as we did on snowmaking. On Monday and Tuesday, for instance, the trailer was parked a little more than 500 feet from the pond; the hose came in 50-ft sections. We made snow only during daylight hours since we didn't have a night crew (!) and felt that the fangun needed to be watched carefully since it doesn't have monitoring systems.



Blowing snow over the timing sheds on a bluebird day for BKL skiers.



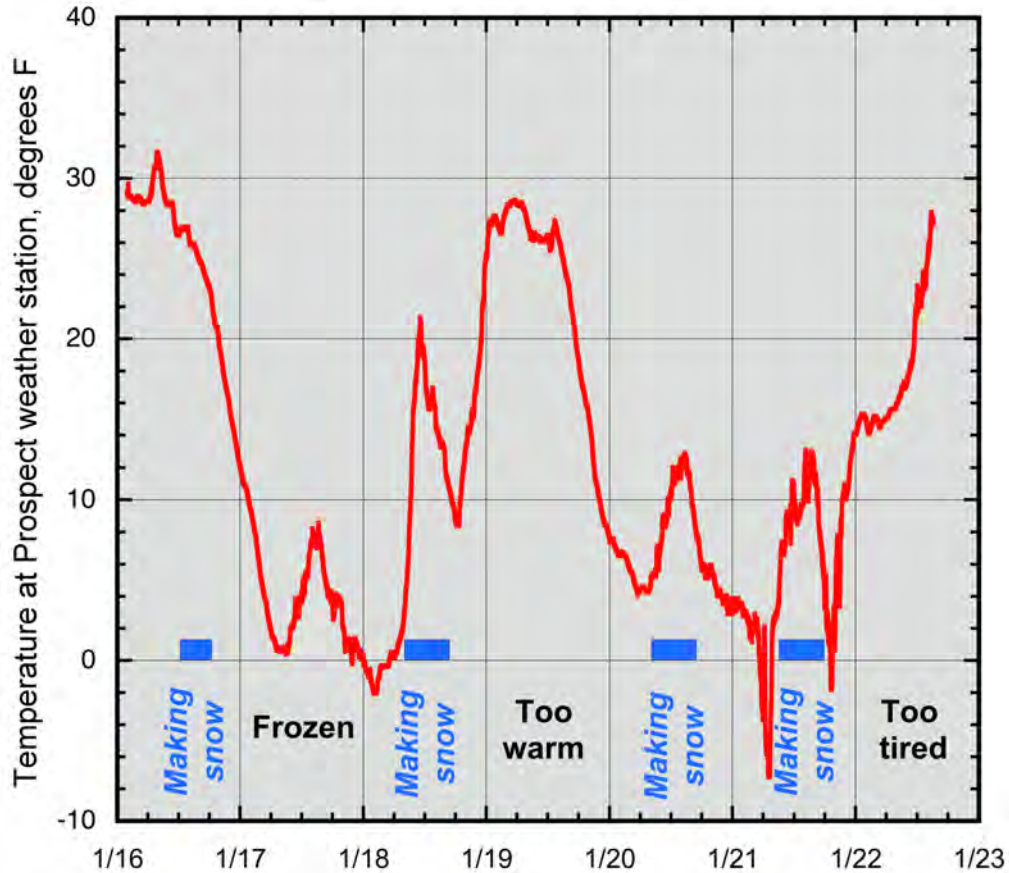
Trying to cover the area near Candycane Lane and the Smoothbore runout



Wet snow close to the gun with drier particles falling near Eph's Ascent



Proper use of the mallet restored our ability to tip the gun up after an hour+ of chasing electronics! Steve had the correct diagnosis from the beginning!



Graph showing temperatures (brrr!) when Prospect made snow using equipment provided by HKD Snowmakers (Natick, MA) and a generator, high-volume submersible pump and hose rented from Walter Pratt and Sons (Troy, New York). The morning of January 21st was the coldest this winter (so far), ideal for making snow, but hard on the snowmakers.

Conclusions--When Prospect makes snow in the future it needs to have a snowmaking crew (hourly and volunteer?) ready to go, a self-draining system of fixed piping (for water and air) and hydrants, and a pumphouse in the corner of the parking lot adjacent to the pond. The choice of snowguns will require an extended discussion but may involve some mixture of high-volume fanguns and tower or boom mounted snowmakers. Middlebury's Rikert Touring Center is probably the best local Nordic example for Prospect to emulate, but in another year the new systems at Mt. van Hoevenburg (Lake Placid area) may provide excellent examples.

DP Dethier, 2/2020