



Newsletter

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The Green Machine - By Liz Rocco & Paul Hoaglund

This winter season Alta Ski Area introduced a green groomer to it's fleet. Built by the German company Kassbohrer, the "Green Machine" is a PistenBully (PB) 600 E+ and it's the world's first snow groomer with a diesel-electric drive. The first prototype was introduced in 2009 and production for the 600 E+ began in 2012. Alta's Green Machine is the fifth revision of the PistenBully 600 E+.

Powering this snowcat is a 12.8 liter Mercedes Benz OM 460 LA rated at 400 hp and 1,400 lb-ft of torque. The same engine as a standard red PB600, but that is where the similarities end. Replacing the old hydrostatic drive which has been the industry standard for many years is a new electric drive. The drivetrain now consists of

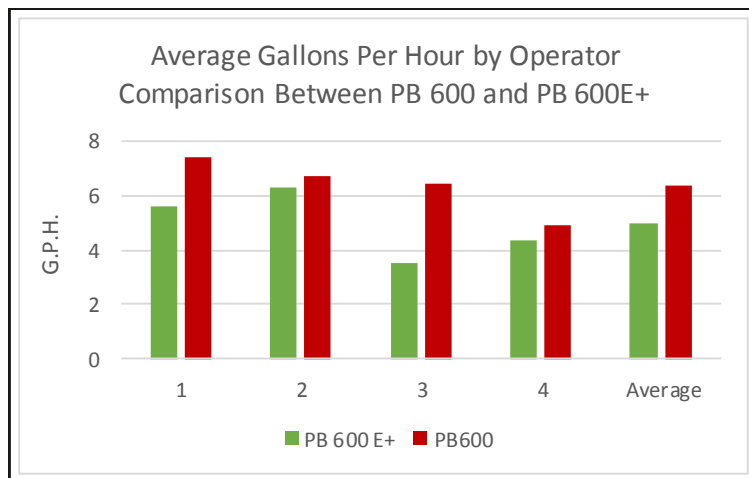


two electric generators powered by the diesel and two electric motors to power the tracks and one for the tiller. What makes this so efficient is that there is very little power loss when converting the mechanical diesel energy to electricity allowing the engine to achieve the same results as a hydrostatic drive without the wasted energy. The cat has just as much power as a regular snow cat but the engine is able to run at a lower RPM and load resulting in a more efficient cat. PistenBully reports 20% reduction in Nitrogen Oxides and Carbon Dioxide, 99% fewer sooty particles and 20% fuel savings over the standard 600.

With the arrival of the 600E+ the mechanics and operators have had special training to safely operate and maintain the new high voltage machine. Now that it has been in service for a few months the operators have noticed reduced fuel consumption and increased power

compared to the standard 600. Time will tell how the 600E+ stacks up against the time tested standard 600 PistenBully.

The graph shows the average gallons per hour (G.P.H.) used by four different operators driving the "green machine" (PB 600 E+) in comparison to the standard PistenBully 600. Since the beginning of the season. To date the "green machine" is using less fuel than the standard PB 600. The Vehicle Maintenance Shop and the Alta Environmental Center will continue to monitor the "green machine" and its performance.



Promoting Excellence on U Campus Through the Alta Sustainability Leadership Awards - By Eva Grimmer, Sustainability Office, University of Utah

This spring, the University of Utah will, for the second consecutive year, partner with Alta Ski Area to present four members of the University community with [Alta Sustainability Leadership Awards](#). These awards, which highlight excellence in sustainability teaching, research, community partnership, and campus improvement, give us an opportunity to recognize many of the amazing sustainability initiatives happening throughout the University.

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Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.

- Margaret Mead

Alta Leadership Awards *continued...*

The awards will be presented on March 3, 2016. So we need to hear from you! The organizing committee is now seeking submissions. If you or someone you know demonstrates leadership in sustainability education, research, or campus/community initiatives now is the time to celebrate them by nominating them. All students, faculty, and staff are eligible to participate.

The Alta Awards honor four important areas:

- **Campus as a Living Lab Award:** Recognizes graduate or undergraduate student who completes an outstanding project or initiative that makes the U more sustainable.
- **Sustainability Community Partnership Award:** Recognizes an instructor or student who models the U's commitment to sustainability leadership through a community research or service project.
- **Sustainability Integration Award:** Recognizes an instructor (at any level) who successfully integrates sustainability education into their course(s).
- **Sustainability Research Award:** Recognizes an individual (student, faculty, or staff member) who is conducting significant interdisciplinary sustainability research.

Send in your submissions today! The form can be found online or you can fill out an application in person. Keep in mind that with the recognition also comes a \$2,500 cash prize, so what are you waiting for? Get to work and nominate your friends, peers, or instructors!

Read the full article at: <https://sustainableutah.wordpress.com/2016/01/12/alta-sustainability-leadership-awards>

January - February Sustainability Events

If these highlighted sustainability events catch your eye, check out our full sustainability calendar at alta.com/alta-environmental-center/resources#sustainability-events.

- **Tour With a Ranger:** A fun, informative, and complimentary program all winter. Meet at the top of Sunnyside lift at 1:30pm, weekends and holidays. For more info: cottonwoodcanyons.org
- **Jan 16 - Snowshoe with a Naturalist:** Join Cottonwood Canyons Foundation for a complimentary 1 and half hour tour in Alta exploring nature at its finest. For more info contact: info@cottonwoodcanyons.org
- **Jan 19 - Stegner Center Green Bag:** This month's presentation features "Restoring the Colorado River—Challenges and Opportunities." For more info: law.utah.edu.
- **Jan 20 - Zoo Just for You:** For children with Autism Spectrum Disorder, find out what makes insects "tick" hands-on! For more info visit: hoglezoo.org/events_experiences/events_calendar
- **Feb 8 - Winter Bird Survey:** Join Tracy Aviary on our monthly bird survey throughout Alta Ski Area. To register or for more info contact environment@alta.com.
- **Feb 15 - Nature's Art:** Join Andy White in a display of "ordinary beauties not so ordinarily noticed." At Red Butte Garden more info at: redbuttegarden.org/andy-white

UofU Environmental and Sustainability Studies Program Orientation in Alta Tree Nursery September 2015

