



2015 Delaware T²/LTAP Center Build a Better Mousetrap Winners



University of Delaware Grounds Services has been chosen as the best Delaware submittal for the 2015 Build a Better Mousetrap Competition for their “3-Point Hitch Brine Sprayer.”

The national Build a Better Mousetrap Competition is all about celebrating innovation by local agencies and sharing ideas, technologies, evolutions, approaches, and modifications that make the jobs of local agencies easier, more effective, and safer at low cost. It is the epitome of “doing more/better with less” and the nationally published booklet proves each year that local personnel are always looking at old problems with new perspectives and applying creativity and innovation to advance the cost-effectiveness, productivity, and safety of their organization.

First Place

UD Grounds Services maintains 25 miles or so of pedestrian pathway on the Newark campus and they needed to reduce the amount of chlorides being applied to the hardscapes. With nearly 23,000 students and another 4,300 faculty and staff, the campus is a busy, busy place and the campus pedestrians are out during and immediately after a storm. So Grounds Services developed a low cost solution to apply salt brine to large plazas, patios, and sidewalks. Leveraging their existing tractors with power take offs (PTOs), they fashioned together an existing 3-point hitch 150-gallon water tank with a PTO-driven pump, adding a spray bar, nozzles, and controller (powered by a 12 volt connection on the tractor). With a 150-gallon plastic liquids tank and PTO pump already among their assets, they added the spray bar, nozzles, and controller for approximately \$2,200.



Second Place



The City of Newark addressed another winter maintenance challenge with their “Two Hands Are Better Than Four” submittal. Jason Winterling, on behalf of Dave Vispi, explained, “the installation of a new plow blade required two men to hold the blade in place and bolt the blade to the plow. While this did not take a significant amount of time, any opportunity to make a two man job a one man job with a little thought and little to no cost is certainly worth it.” Utilizing an old jack and scrap materials, a plow blade temporary support was constructed. Jason estimated that the total cost was less than \$100, including labor.

Third Place

UD Ground Services grabbed the third spot as well with their “Front Mounted Leaf Collector.” Roger Bowman explained that their, “large leaf collection system and vehicle were too large for many of the small, tight areas on campus and a current staff member had previously utilized a small leaf vacuum [mounted on a] snow plow lift. By mounting [the power unit] to the front of the truck, we improved visibility, safety, and productivity.” They utilized a Fisher snow plow frame and lift system, together with electrical connections to create the quick connect setup. They then connected the vacuum to the plywood truck body insert by running the pipe over the cab of the truck.



See more detail in our upcoming newsletter. The Delaware T²/LTAP Center congratulates UD Grounds Services and the City of Newark for their great submittals and thank them for sharing their ideas!

