

2018 Build a Better Mousetrap Winners

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In December we proudly announced our first Build a Better Mousetrap Competition. Despite a quick turnaround time, in just three months we received ten entries; all vying for the top prize of a \$50 gift certificate to a hardware store and most importantly; bragging rights.

Criteria

Our engineers narrowed the ten entries down to the top four and the Cornell Local Roads Program Advisory Panel ranked those four based on the following criteria:

1. Low Cost – Does the project have a low cost relative to its benefit?
2. Implementation – How easy is the project to build/create?
3. Solves a Problem – Does the project solve a problem that is somewhat common throughout the state?
4. Transferable – How easy would it be for someone else to take this project as described and create it themselves?

The Winners

The final scores for the top four entries were so close that we decided to submit them all to the national competition!

First place goes to the Town of Orangetown Highway Department for their Hitch Witch. It took the department's Welder/Fabricator, Bill Bodenstab, about 1.5 hours to conceptualize and weld together this hitch, which attaches to a forklift. It allows one employee to safely hook up and move equipment such as leaf machines, air compressors, asphalt roller trailers, etc. without needing a coworker to back them up and stand behind the reversing vehicle. Materials cost about \$40.



Town of Orangetown Hitch Witch

Second place goes to the Town of Ulster Highway Department for their Under the Guide Rail Cleaner; a much-needed innovation for municipalities across the state who deal with plants, sand and debris accumulating under guiderails. Chris Kohler, Road Forman and Matt Bechtold, Shop Foreman, used spare parts from their highway garage to design a hydraulic attachment that mounts on a bobcat. We know this is a needed innovation since four of the ten entries were ideas for cleaning around guiderails.

The third place winner goes to the City of Beacon Highway Department for their Confined Space Simulator; a manhole "mock up." Designed and built by Maintenance Mechanic, David 'Davey' Way, the Simulator cost approximately \$1,500 in



Town of Ulster Under the Guidrail Cleaner

materials and allows for indoor confined space training by larger groups than was previously possible. Through a shared services agreement, the portable simulator has also been used by the City of Beacon Fire Department and other municipalities for training.



Town of Seneca Highway Department Hydraulic Snow Fence Roller

Everyone who submitted an entry will receive a letter of commendation to their Board, a press release to their local newspaper and have their project highlighted on our website.

Conclusion

Despite the fun surrounding this competition, our real goal in everything we do is to get you helpful information that will make your job easier, safer, or more cost effective. As one of 52 Technical Assistance Program Centers across the United States, the Cornell Local Roads Program serves as a clearinghouse for innovative ideas and best practices. To that end, take a look at all of the excellent entries we received on our website at <http://www.clrp.cornell.edu/trainingevents/BBMT.html>

And, stay tuned to hear how our four entries do as they represent New York State in the national competition. Congratulations to everyone who entered!



City of Beacon Highway Department Confined Space Simulator

In fourth place is the Town of Seneca Highway Department's Hydraulic Snow Fence Roller. The Snow Fence Roller is an inexpensive (materials were under \$300) machine that can mount on a bobcat or any other live hydraulic machine and rolls up thousands of feet of snow fence every year. Highway Department Mechanic Jim Edlredge designed and built the Roller which saves time, cuts down on back injuries and creates tighter rolls that reduce off season storage space.

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