## **Plant Solutions**

The NRCS Plant Materials Program newsletter for the conservation community

## Money Saving Farm Equipment Innovations Would Make a Nice **Present for Any Farmer This Holiday Season**

Innovation is a huge part of the American spirit. It has made us the most powerful nation in the world, and we see it all around us, from the day-to-day devices that make our lives easier to the more complicated technologies that send satellites into orbit. At the Aberdeen, Idaho Plant Materials

Center (PMC), the spirit of innovation has resulted in the

modification of farm equipment that has greatly improved the productivity of the PMC.

"Historically, innovation in farming practices is one of the areas where a new invention such as the cotton gin or a modification of existing equipment has resulted in an enormous impact in agricultural output. Such innovations have enabled humans to more quickly plow, grow, harvest and distribute agricultural products to an ever expanding world population and to address environmental

needs as well," said D. Boyd Simonson, biological technician at the Aberdeen, PMC.

An innovator by nature, Simonson has altered and/or invented numerous modifications to standardized farm equipment, which has resulted in the savings of hundreds of man hours at the PMC and, if implemented throughout the nation, could save farmers thousands of dollars in labor costs according to Simonson's supervisor, PMC farm manager Brent L. Cornforth.

One such modification, and something that nearly qualifies as a complete invention because it's so radically different than its predecessors, is the "WaterJet

Stinger." Called such — because if the powerful spray of water were to be pointed in your direction it might cut right through you — the WaterJet Stinger is used to "dig" out holes in the soil for planting tall cuttings.

"It's extremely important in the semi-arid West that any plant to be installed in a riparian zone have its roots in

the deepest water table of the year," said Cornforth. "The problem I've found with other high-pressure water jets is that they are weak, in that they don't hold-up well to the pressure and pounding of boring holes, and tend to weaken the steel."

And unlike its competition the WaterJet Stinger is anything but "primitive." Consisting of an array of hoses, valves and power pumps all atop a small platform that moves on small tank-like treads, the WaterJet Stinger (though not a basic machine) is simple to

transport and operate, and can dig a narrow shaft 6.6 feet into the soil.

"We have found that a three-person team works very well in the planting process. One member of the team runs the WaterJet while the other members haul the cuttings and shove them in the holes," said Simonson. "It gets the job done like nothing else I've ever used."

Contact: Boyd Simpson, Boyd.Simson@id.usda.gov Link to full-technical article: http://plantmaterials.nrcs.usda.gov/pubs/idpmctn390201.pdf



WaterJet Stinger Ready for Action in Aberdeen, ID



## Fun Stuff:

## The three simple rules for taking proper care of Holiday season plants — even if they're not good examples of conservation solutions

Holiday-season plants may not be good examples of vegetative-conservation solutions, but hey, we all get them, so with the holiday season upon us, it's the time for giving and receiving flowering-potted plants. Colorful and brightly decorated plants can give the season a festive flair.

Some of the best and most popular holiday-season plants include: flowering cacti, azaleas, begonias, chrysanthemums or the tried and true poinsettias. If properly taken care of, these plants can be enjoyed well into January and even February. Care of these seasonal plants, whether a brilliant cyclamen or a cheerful kalanchoe, is easier than you might think. Keep these three simple rules in mind when caring for your holiday-season plants:

 Do not over water! Too often folks drown their plants by watering at regular intervals.
 Remember, most plants only need water when the soil starts to get dry. Over watering can result in depriving the plant of oxygen and causing root rot.



**Christmas Cactus in Bloom** 



**Autumn Red Poinsettias** 

- Seasonal plants are often shocked by the different temperature changes between your house and the greenhouse they grew up in.

  Temperature is a significant reason why some seasonal plants have an extended life or not.

  Case in point: poinsettias are very sensitive to chills, and a prolonged chill will cause loss of leaves. But keep in mind that a poinsettia will do best in, ironically, the coolest part of the room but not in a cold draft. So keep them away from sources of heat. A mild room temperature in the mid-sixties will suffice. And never ever plant poinsettias outside unless you live in a tropical environment. The first chill will kill them.
- Give your seasonal plants lots of light because for the most part these plants have been out of the greenhouse environment for a short period of time before being brought into your home.

Remember the holidays can live on well into winter if your seasonal plants are happy and properly cared for!

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