

# The Profitability Of Hydroseeding



Source: [www.TurfMagazine.com](http://www.TurfMagazine.com)

The first hydroseeding machine was built during the 1950s in Connecticut for the state highway commission during construction of the interstate highway system. In many areas, the highways had to cross over hills instead of around them, and workers discovered it was a lot more efficient to “blow” the seed onto the properties surrounding the pavement than it was to spread the grass seed. From that day to now, hydroseeding remains an effective and cost-saving method to establish grass along highways and to other properties, including residential properties.

Today, landscape contractors can find hydroseeding to be a profitable business opportunity. Dave Woehler, owner of [Woehler Landscaping LLC](#), Pittsburgh, Pennsylvania, added hydroseeding as a service to his already established business, whereas Robert and Michelle Lucas founded [Chautauqua Hydroseeding LLC](#), Jamestown, New York, solely to provide services like hydroseeding and erosion control. Whether a contractor uses hydroseeding as an add-on service or an entire company model, there is room to grow and establish a very profitable service.

Ray Badger, president of Turbo Technologies Inc., Beaver Falls, Pennsylvania, says the biggest change to the hydroseeding industry has been how much less expensive it has become to get into the business. In the 1990s some lower cost equipment emerged, which made it more affordable for the average landscape contractor to get into hydroseeding as a service to provide, he says.

Hydroseeding services continue to grow in popularity. “We were up 25 percent in number of units sold between 2013 and 2014, and we are anticipating another 25 percent in growth this year,” Badger says, regarding his company, which manufactures more than 30 hydroseeding units ranging in size from 50- to 1,600-gallon capacities.



One of the advantages of hydroseeding is that spraying

the slurry mixture allows for more precise application around landscape features. PHOTOS: TURBO TECHNOLOGIES

## Recognizing a need

There are a lot of advantages to hydroseeding. Spraying the slurry mixture allows for more flexibility in terms of applying it precisely and not having to worry about landscape features.

For example, hydroseeding is particularly useful in seeding hillsides because a contractor can stand at the bottom of the hill and spray on the seed. Hydroseeding is also good for irregular or hard-to-reach areas, such as narrow strips adjacent to sidewalks, walkways, flowerbeds or other quirky areas.

After retiring from the [New York State Department of Environmental Conservation](#) in law enforcement, Robert and Michelle Lucas recognized the need for a hydroseeding and erosion control company in the beautiful Chautauqua Lake region of New York. The New York EPA had mandated stormwater pollution prevention plans, and Lucas says there is area-wide concern about increased nutrient flow into Chautauqua Lake. Concerns about weed growth and water quality are becoming bigger issues in the region. Seeing no local contractors offering hydroseeding and erosion control services, they started their company in 2009.

“The public is actually promoting more regulations to reduce sediment and erosion. That has helped our business grow,” he explains.



PHOTOS: CHAUTAUQUA HYDROSEEDING

Hydroseeding requires less labor than both sodding and dry seeding. It is a pretty profitable service to add on to a landscaping business or even make a company's main focus. According to Badger, hydroseeding between five and 10 lawns would pay for a hydroseeding machine in a year. A contractor will be able to charge more for a hydroseeding service because the customer perceives it as a premium way of getting their lawn established and therefore is willing to spend more money, he adds. Plus, hydroseeding is a one-step operation, and the grass comes up faster because the seed is soaked in water, so birds avoid eating the seed compared to dry seeding, and the materials used won't blow off like straw or hay would.

Hydroseeding will cost a little less than dry seeding simply because it's a faster process, but the materials will basically be the same for each method. For example, hydromulch and straw are pretty comparable in cost, Badger continues.

Compared to installing sod on a property, the main advantage of hydroseeding is primarily cost. Hydroseeding services typically cost the customer a quarter of the price of sod, says Badger. Sometimes sod installation could have issues with grass taking root and growing on the new soil. Homeowners in affluent neighborhoods will typically get sod in their yards because they are

instant lawns, and the homeowners aren't necessarily worried about cost. In some instances, the customer will sod only the front yard and then hydroseed the backyard.



Hydroseeding requires less labor than both sodding and dry seeding, making it a profitable service to add to an existing landscape business, or even a company's main focus.

## **Challenges to overcome**

Although hydroseeding is pretty forgiving overall, the service still has some potential drawbacks, including the cost of the unit. A machine for hydroseeding might not be worth the cost to only hydroseed one or two lawns. The better option for the occasional job would be to rent a unit.

"The key to any successful seed job is the soil preparation," Woehler says. "If your soil prep is lousy, your seeding results will be lousy." If the site area isn't prepared, Woehler says there will be an additional charge to bring in skid loaders and topsoil. "Personally, I like the jobs that already have soil preparation complete and are ready to be hydroseeded."

Having a poor water source will serve as a limitation to a contractor's efficiency.

The time it takes to refill the machine with water can also be a challenge to productivity. Also, if the customer doesn't have a spray system for irrigation, the contractor is then relying on the homeowner and Mother Nature to water. That can be risky, because if the grass doesn't come up and thrive, who is the property owner going to call? You guessed it.

"Whether you dry seed, hydroseed or sod, you have to water," explains Woehler. "If you do not water, your seeding results will be spotty."

If the weather brings a very heavy rain, the hydroseed mixture may puddle or wash away and require reapplication. Woehler says he includes these potential scenarios in his contract for the customer to keep in mind. In these cases, he will hydroseed the property again and all the client will need to do is pay for the materials. Initially he focused the service on the residential market, but has since grown its presence in the commercial and government markets, too.

He admits he and his crew faced a learning curve when they began the service. From time to time they had issues with clogs, hoses, determining the right mixture of materials and what application rate to use. Effective hydroseeding needs to have a good application rate of slurry. It is not unusual for inexperienced operators to spray on the hydroseeding mixture too light.

## **Necessary equipment & materials**

The only equipment necessary to perform hydroseeding is a hydroseeding machine and a truck or trailer to put it on.

According to Badger, contractors can get a decent hydroseeder for around \$5,000. For a contractor doing smaller jobs, a unit might cost somewhere around \$3,000. Large lawns and projects will require a larger machine for efficiency and may be in the \$10,000 range.

A hydroseeding machine is made up of a tank that will mix up the materials into the slurry that is then sprayed onto the property. There are two types of tanks that you can use to mix the slurry. A jet-agitated tank uses a powerful flow from the pump to mix the slurry. This type has fewer moving parts, requires less maintenance and is easy to use, according to Badger. The other is a paddle-agitated type that uses paddles to mix the slurry allowing the machine to handle heavier materials.

The hydroseeding mixture will consist of water, grass seed, fertilizer and hydromulch. Preemergent weed control and tackifier, a tacky substance used on slopes, and other additives can be included in the mixture as well. Hydromulch typically comes in bales of chopped up newspaper materials with a green dye, which makes the mixture look nice when sprayed onto a property, says Badger.

Dave Woehler knew about hydroseeding when he started his company in 2004, but didn't add the service until 2006 when he bought a used TurboTurf jet spray, 500-gallon hydroseeder and did some research throughout [Hydroseeding.org](http://Hydroseeding.org), the website for the International Association of Hydroseeding Professionals.

Woehler's initial jet spray machine only allowed for paper products to be mixed into the slurry. After about five years, he invested in another used machine that could handle a 70/30 blend of wood to paper. He paid for that unit after its first three jobs.

This past December, Woehler upgraded again to a new 750-gallon hydroseeding machine that is mechanically agitated with a hydraulic cylinder and has a gear pump and a flush tank. This machine is in the \$20,000 range and is suitable for servicing bigger projects. It can handle thicker slurry and can spray it further and cover more square footage.



Lawns can be established with sod and by seeding with a spreader or hydroseeder. Ideally, it is best to hydroseed on clean, fresh soil and to keep the seed watered until the grass is firmly established. PHOTOS: RANSOM BROS.

For a basic hydroseeding job using the 750-gallon tank, Woehler puts in 500 gallons of water; 10 pounds of basic, all-purpose fertilizer; 50 pounds of grass seed; about 4 bales of mulch; and then maybe add a tackifier, depending on the property's slope, or a preemergent weed control. Woehler says he can empty the 750-gallon tank in 18 to 22 minutes. He also invested in a submersible pump for situations where a garden hose or a fire hydrant aren't available, so that he could just put the pump in a nearby stream or pond to refill the pump.

Chautauqua Hydroseeding uses two [Finn HydroSeeders](#), one 900-gallon and one 700-gallon machine. The company also has a 950-gallon TurboTurf tanker trailer for water, which they can utilize as a nurse tank to allow the hydroseeder to stay on the job. "Obtaining water is our biggest problem that arises," says Lucas. "In places where there is no municipal water, we have to look to get water from ponds and streams." For erosion and sediment control jobs, Chautauqua Hydroseeding offers both rolled and sprayed erosion control products as well as strawblowing using a TurboTurf blower machine.

### **Best times to seed**

The optimum time to hydroseed for cool-season turf is typically fall or early spring. Badger says many people choose fall just as summer is ending. The soil is still warm and cools at night, which is ideal for establishing cool-season grasses. But that doesn't keep contractors from spraying later in the season and still getting good results depending upon conditions. "We spray right up until December usually. Until the snow flies," says Lucas.

Seeding in the spring can still be effective, but your germination rate is usually a bit slower because the soil temperature coming out of winter is cooler. Spring is also the peak of broadleaf and annual weeds.

In a lot of areas, hydroseeding can be done year-round, depending on how much the customer is willing to water. In the Pittsburgh area where Woehler is located, he suggests avoiding the summer months and having clients wait a few more weeks to have better results by seeding in the fall.

If the homeowner hasn't moved in yet or the property owner is unable to water, then avoid hydroseeding from late June through mid-August, says Badger.

For warm-season turf, hydroseeding can occur over a longer period of time compared to cool-season. There are different types of grasses can be planted based on the time of year or based on the certain temperatures needed for seed types to germinate.

Ideally, it is best to hydroseed when there is no grass, on a clean fresh slate. When people have spotty, established turf, Woehler says using dry seed is better to fill in the patches. "I always tell people it's like painting, you're painting the hydroseed onto someone's lawn," Woehler explains.

### **Price to make a profit**

Woehler Landscaping LLC is a full-service landscaping company, and hydroseeding accounts for 15 to 20 percent of its overall business. The company doesn't have a dedicated crew for hydroseeding since it only has seven employees. Woehler will typically have three people with him for hydroseeding jobs. He estimates that he hydroseeds about 15 acres of property annually, mostly new residential construction and commercial properties.

Chautauqua Hydroseeding has also grown steadily, says Lucas. This year he is doubling his workforce with a second two-person crew. Lucas' son will run the

second crew. Michelle, co-owner of Chautauqua Hydroseeding, helps keep the company running smoothly. "My wife plays an integral part of the business and does all of the backend work, including contracts, billing, hiring, taxes, payroll and equipment and material purchases," says Lucas. "As co-owners, I'd like to think we were 50/50, but she probably puts more hours into the business than I do."

Hydroseeding can be a supplemental source of income to an already established landscape business because the contractor can offer the service to current clients, as well as find potential customers. Often, hydroseeding jobs lead to other jobs, such as installing landscapes, installing plants and mulching.

"My typical job is 7,000 to 12,000 square feet," Woehler says. "I've done a few jobs that have been several acres and some that have been 1,500 to 2,000 square feet."



Hydroseeding units come in a range of capacities and price points. This larger machine can tackle very big jobs, but there are smaller units just right for residential seeding. PHOTO: CHAUTAUQUA HYDROSEEDING

He prices hydroseeding jobs based on square footage, type of seed, additives and if any site or soil preparation is necessary.

Here is an example of Woehler's typical pricing strategy:

- 2,000 square feet or less: 20 to 25 cents per square foot
- 2,000 to 10,000 square feet: 8 to 12 cents per square foot
- 1 acre or more with adequate water source: 4 to 6 cents per square foot

## **Educate yourself before jumping**

When starting out in hydroseeding, Woehler says you must become knowledgeable about cool- and warm-season turf depending on the region of the country you are serving. You must have a good grasp of mathematics, too, including understanding rates of mulch and seed and carefully determining each property's size in square feet. He started his company, Woehler Landscaping, when he graduated from Penn State in 2004 with a degree in landscape contracting.

Becoming a member of the IAHP helps get your name out there as it lists contractors' names and contact information on the website for homeowners or contractors looking for hydroseeding services in their location.

"One of the best things I did was join and become a member of the IAHP, says Woehler. "After the first year, I wouldn't say I got a lot of calls by having my name listed on [Hydroseeding.org](http://Hydroseeding.org), but I got 20 to 25 potential leads for different jobs."

Lucas is also a member of the IAHP. "One of the lucky moves I made early on was I joined IAHP," he says. "That helped tremendously as far as gaining knowledge from seminars and training offered, as well as friendships among other business owners and professionals." Lucas refers to Badger from Turbo Technology Inc., as his mentor when he and his wife began Chautauqua Hydroseeding. "Ray is such a good guy. He really helped me early on from day one by answering my many questions," Lucas says.

According to Lucas, his initial focus when starting the company was maintaining a good reputation with clients and not necessarily making a profit. "The customer expects you to grow a stand of grass," Lucas explains. "And whether you make money on that job or not is not their concern. You're No. 1 responsibility is to grow the grass. You'll learn later on how to make money in pricing."

Woehler has also found that good customer service is key. "People really appreciate if you know what you're talking about, and you show up and do the job correctly," says Woehler. "Be honest and up front with people. They respect that."

Other than buying the machine, learning about hydroseeding and getting his name out there, Woehler says there weren't too many challenges to adding hydroseeding as an additional service.

As well as being president of Turbo Technologies Inc., Badger also runs his own hydroseeding business. He says he does about 50 to 60 hydroseeding jobs per year.

"My main business is building the machines, but I just sort of enjoy hydroseeding," explains Badger. "And I like to play with my machines. Sometimes I get ideas on how to improve them. Being hands-on is a good thing."