# WIEDENMANN'S WILL WOLVERTON ON AERIFICATION

healthy field is goal of every sports turf manager. To get that superior field, one very important requirement is a high number of plants per square inch. To achieve this you need soil conditions of approximately 45% minerals, 25% air pores, 25% water pores, and 5% organic matter. Quite often the number of air pores is reduced due to compaction and poor water infiltration, which causes saturation, meaning that the roots of the grass cannot breathe as they are literally drowned in water.

Aerification, especially at deeper depths, can resolve this issue by punching through any "black layer or hard pan," thus reducing compaction which increases water, air, and nutrient exchange to the roots. As a result, root depth will increase causing healthier leaf production and improved resistance during stress conditions. This can be accomplished with either solid tines or coring tines. One advantage of using coring tines is the ability to reduce thatch while reducing decompaction. The downside is the mess that is left on the field from the cores.

There are some new machines on the market that help with this clean-up process. One particular machine collects the cores and transfers



them into four rotating screens that separate the sand from the organic material (thatch). The sand is then returned to the field and the thatch is collected. This saves time, labor, and the cost of sand or topdressing material. Aerifiers and complementary machines continue to advance to make the aerification process easier and faster while creating great results.



## GreenSlicer for aeration

GreensGroomer WorldWide, Inc. presents the GreenSlicer for cost-effective aeration needs. Developed and launched in 2006 for the golf course market, it provides the ability to spike or aerate without all of the complex machinery. The GreensSlicer is an affordable alternative to motorized methods, a ground-driven, well-engineered performer that satisfies the needs of sports turf professionals. It's a low disruption tool that opens up the upper turf profile, allowing for improved water and oxygen infiltration. Strictly a tow-behind unit, the GreensSlicer doesn't require hydraulics, PTO, or separate power source. It's easy to adjust cutting depth with its simple water tank ballast and the split-tine shafts prevent turf tearing when cornering.

GreensGroomer WorldWide, Inc.



## Redexim's Verti-Drain "Bullet"

The new model Verti-Drain "Bullet" has working widths of 60" and 80" and can be used with tractors of 35-50 hp. It has working speeds near 3 mph hence making it easily the highest production aerator ever built. All models are equipped with maintenance free, self lubricated sealed bearings on all pivot points, three speed gearbox, and the patented parallelogram action. These Verti-Drain models are fast and strong, penetrating nine inches into the soil. Depth adjustments are done from the tractor seat as adjustments of the front and rear rollers are done hydraulically.

**Redexim North America** 



#### **Toro's ProCore 648**

Toro's ProCore 648 is the most productive walk greens aerator with a 48" coring swath. Its innovative wheels-behind design eliminates crushed cores and hole damage. The TrueCore ground following system maintains consistent coring depth and consistently round holes are achieved through elastomer RotaLink geometry. The ProCore 648 is also easy and safe to operate: a single switch on the handle controls the tine head and a handle ball engages forward and reverse.

The Toro Company



## Turfco expands TurnAer XT5 product line

Turfco revolutionized aeration with the patented and patent-pending TurnAer™ XT5 steerable and reversible aerator. Now with engine options, increased speed and a new weight system, the XT5 is more efficient and performs better on hills. The XT5 aerator is now available with an optional one-gallon-tank Subaru engine or a Briggs & Stratton engine. With a new gear ratio system, the aeration speed is increased by 14%. More ground can be covered in less time without sacrificing quality or the ability to turn while aerating. The new weight system allows operators to adjust the weight in the back of the aerator, improving hill performance and control on hills. Operators can take advantage of the enhanced speed on hills, while still maintaining control.

**Turfco Direct** 



#### John Deere Aercores

The Aercore 1500 is tractor-mounted with a heavy-duty frame, tine rams and adjustable hole spacing and increases productivity while providing flexibility needed on the job. The 1500 can pull as many as 30 cores per square foot, depending on the ground speed of the tractor, and is compatible with the John Deere Twenty Series compact utility tractors. The Aercore 2000 has an 80-inch coring swath, produces good quality coring holes up to 4 inches deep, and can cover 100,066 square feet per hour. Operators have a choice of two coring patterns, a 2.4-inch pattern or a 3.2-inch pattern, depending on the speed of movement.

John Deere

## **Turf Time Equipment aeration options**

TurfTime Equipment offers a number of tools that provide flexible and cost effective solutions for an efficient aeration program. The TurfTime Advantage aerator can be fitted with interchangeable coring, solid, or slicing tines. Precision chisel point solid tines promote quick recovery, allowing frequent aeration without disruption of play. For removal of excess organic matter, the Thatch Master verticutter and dethatcher, with its thin blades, and choices of spacing and depth of cut becomes an integral part of any aeration plan. TurfTime Eq. topdressers, for heavy seasonal applications, or frequent light treatments, maintain and enhance the effects of the complete aeration program. Used together these machines maintain ideal conditions for healthy and beautiful turf, suit current restrained budgets, and increase the income stream by keeping facilities in play.



**TurfTime Equipment** 

## AerWay soil aeration equipment

AerWay by SAF-HOLLAND is an innovative world leader in the manufacture of soil aeration equipment for agriculture, golf courses, sports fields, orchards and vineyards. The AerWay ground driven design provides the utmost in durability, flexibility with high speed performance.

AerWay has a variety of tine options available to help you tailor your sports field turf maintenance activities. Quickly replaceable complete tined roller assemblies and attachments will let you use the same AerWay platform. Do all of your aeration or soil preparation for sanding and overseeding at higher speeds without the costly breakdowns of mechanically driven equipment. For compaction relief and the stimulation of subsurface air/water percolation without disrupting play nothing beats an AerWay.

AerWay



## **Jacobsen Quick Aerator**

Convert your Cushman Turf-Truckster into a productive aerator with the Quick Aerator attachment from Jacobsen. It easily attaches to your Truckster in minutes and offers a variety of tine styles to choose from including slicing, coring and spoon. Lift or lower the unit from the driver's seat with the Truckster's standard hydraulics. The Quick Aerator is ideal for any turf areas, including sports fields and recreational areas.

Jacobsen



#### **AERA-Vator**

Since 1991 the AERA-Vator manufactured by First Products Inc., has established a reputation of providing soil aeration and cultivation in the hardest dry conditions. Different aeration methods are used to open the soil surface to introduce oxygen and allow nutrients to reach the turf root zone enhancing root development. Aerification techniques have evolved over the years and "as with everything else" advancement in equipment technology has significantly simplified the process. First Products uses the only "patented" PTO-powered vibrating rotor to fracture the soil. This method is sometimes called shatter tine aeration and works best in dry conditions.

**First Products Inc.** 

## Wider Shockwave relieves sports surfaces

Launched at the STMA Exhibition, the new Shockwave 275 by Imants is a new wider model has a working width of 109" suitable for 100hp+ tractors. The Shockwave is a linear decompactor, designed to totally decompact heavy wear areas by relieving soil compaction, improving aeration and removing surface water. They have proved exceptionally effective in these extremely wet weather conditions. Whether working in isolation or in conjunction with existing pipe drainage schemes, the Shockwave is the perfect method of draining water quickly and unhindered to the existing sub-surface systems. The Shockwave also leaves a continuous slit allowing the operator to slit back to drains, ditches or other water collection systems.

**Campey Turf Systems** 

## Z-Plug zero-turn aerator

The Z-Plug zero-turn aerator addresses the slow and labor-intensive job of aeration. The first stand on zero-turn aerator of its kind, the Z-Plug has capabilities of adding attachments such as a slice seeder, snow blade, de-thatch rake, sprayer system and spreader. Powered by a 23 hp Vanguard Commercial engine, the Z-Plug can aerate over 80,000 square feet per hour (at 8 mph), and produces core depths up to 3 1/2". The unique floating tine head with hydraulic down pressure can maneuver around trees and beds while engaged. The tine head can be lifted up in 2.5 seconds for quicker turns. Quick release attach points make mounting and removing attachments simple without tools.

L.T. Rich



PLUGR's PL845 Pro VS is the first reciprocating turf aerator on the market to allow the operator to select various speeds to maximize productivity or core density, and to adjust for complexity, area, and operator preference. With the sleek unibody design and 30" effective aeration width, the PL845 variable speed aerator is the perfect machine for situations involving multiple lawn sizes and types and multiple operators. Like all PLUGR aerators from SourceOne Outdoor Power Equipment, the new Pro VS is designed for easy operation, low maintenance, excellent aeration results, repeat customers, and profitable productivity.

SourceOne







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### **Tools**&**Equipment** | Aeration





The one-pass design of the Earth & Turf Linear aerator changes and improves the structure of soils for healthier turf. Soil and thatch restriction are permanently modified. Used after the area has been topdressed with calcined clay, compost or sand, the Linear Aerator conditions a 58-inch swath by cutting grooves in the turf 3" deep, approximately one half inch wide and 3.5" apart. Aggressive, reverse-spiral-mounted teeth cut the grooves and bring both soil and topdressing material up over the rotor. The blended materials are then brushed back into the grooves by steel fingers on a filler bar, which reciprocates side to side.

The 1,035 Lb. Linear Aerator is designed to fit the Category I 3-point hitches of tractors with 35 to 45 PTO horsepower. Standard, 540 RPM power take off drives the unit's rotor at 168 RPM through a strong, 100H chain.

Earth & Turf Products, LLC



## **Broyhill's AccuAire**

Broyhill's AccuAire core aerator is one of the most flexible aerators on the market, able to penetrate the toughest terrain. The FlexWin design allows the AccuAire to follow the contour of the ground, providing even penetration. Solid steel frame and extra-wide racks add weight to maximize core depth. Core spoons rotate on new sealed roller ball bearings for years of heavy-duty service. Water tanks are optional for extra weight on compact turf. Available in 3 point and trailered. Equipped to use slicer blades or core spoons, widths 69 inches or 93 inches. The trailered AccuAire is equipped with a hydraulic cylinder or electric actuator lift.

**Broyhill** 



### Millcreek core aerators

Millcreek's simple, rugged core plug aerators give turf roots the air and water they need, especially in high traffic areas such as around soccer goals and other heavily used areas on natural grass fields. Millcreek aerators feature independently mounted spoon wheels with rear discharge, enclosed in a heavy gauge steel safety cage. Millcreek aerators are tractor mounted on a three-point hitch (500 pound capacity). Weights are added to tow behind units for penetrating dry or compacted soil.

Millcreek Manufacturing



#### Core aerators from Land Pride

Land Pride's 25 Series Core Aerators are available in 60" and 72" widths to relieve soil compaction and allow air circulation in sports turf. These aerators use replaceable case hardened closed spoons mounted on weighted rotating discs, and the spoons pull cores up to 3" in length from the soil profile every 7" of forward travel. Pulled cores are deposited on the surface for subsequent drying, pulverization, or removal. Optional poly water tanks fit in the top mounted weight trays in order to achieve maximum penetration. When filled with water, these tanks provide significantly increased down pressure on the spoons.

**Land Pride** 



#### Exmark 30-inch stand-on aerator

Designed to deliver maximum productivity and durability turf professionals demand, the Exmark 30-inch standon aerator features a split-tine design to allow easier turning with tines engaged. The compact design heightens maneuverability while the 30-inch aeration width and 7.5-mph top speed deliver maximum productivity. Mass is centralized directly over the tines for maximum core depth consistency, and core depth is adjustable, from 2- to 5inches. The self-cleaning tines are easy-to-replace. Tine down-force is hydraulic-actuated, and adjustable by the operator. An electric-start Kawasaki V-Twin powerplant delivers professional-grade power, reliability and durability. The Exmark 30-inch stand-on aerator is covered by a 1-year limited warranty.

**Exmark Manufacturing** 



### Creating a healthier turf

Aerate and loosen compacted soil in less time with less labor compared to walk-behind or pull-behind aerators, even in the tightest of spaces, with a Grasshopper AERA-vator coreless lawn aerator. The PTO-driven AERA-vator works without slicing or cutting, improving turf development and water absorption with little surface disruption. The patented vibrating tines deep-fracture soil instead of plugging cores, which means turf areas are immediately available for use. The AERA-vator attaches in place of the out-front mower deck for zero-turn maneuverability.

Grasshopper