Controlling critters to net more profits

Moles? Geese? Rats? From traps to ‘porcupine wire,’ here are some control aids.

by James E. Guyette
Contributing Editor

Uninvited critters that come a-callin’ can wreak havoc on any landscape, golf course or athletic field. Fortunately, innovations abound, giving you an increasing array of impressive tools to bait, trap and exclude unwanted visitors. However, you may find yourself under increasing pressure from customers to do away with any pests in a humane manner.

“Exclusion” is rapidly becoming a technique of choice. This merely involves keeping the animals at bay before they ever set paw on the property. (Any landscape manager who's been vexed by a vole can tell you that exclusion is better than trying to rout an already entrenched rodent.)

For larger animal pests, a new line of Get Away repellents from IntAgra Inc. uses all-natural ingredients that repel by both taste and odor without being offensive to humans. It reportedly keeps away deer, rabbits, squirrels, raccoons, dogs and cats. Other manufacturers are nosing into the field with similar products.

Rodents can be a particular concern to homeowners fearful of the much-publicized Hantavirus. Sonic Technology’s PestChaser Ultra-sonic Rodent Repeller uses a highpitched noise that hurts the animals’ ears while remaining un-heard by humans.

The battery-powered, lunchbox-sized Rat Zapper from Agrizap uses a jolt of electricity to dispatch rodents. It is considered humane because death comes quickly.

Traps and poisons were causing adverse customer reaction among the clients of the Morehart Mercantile Corp. outlets in California, so owners Marty and Patricia Morehart switched to the Rat Zapper. “We are rat- and mouse-free, and we have also used the Rat Zapper in our home as well as on our ranch with equal results,” they note.

Birds and geese—For Bill Stout, president of Stout's Pest and Weed Control in Mountain View, Calif., birds were a prime source of irritation to his clients. He found that birds stayed away after he affixed stainless steel “porcupine wire” to stabilize them with the aid of exposure.

continued on page 12
CRITTERS from page 11

from Cat Claw to gutters, chimneys, awnings and wherever else the birds were likely to rest. They are not harmed, yet the sharp spines ruin any roosting plans.

"It's a long-term solution versus the gels that we used in the past," Stout states. "It's good and clean and the people don't notice that it is there," he points out.

Geese that present problems on golf courses can be given the heave-ho by strategically placing a tough netting product from GridTech. Geese use ponds as a source of protection, and when they are denied access they leave.

"When the G-Grid is installed, the geese can no longer get from the water to the grazing site and then back for protection," explains GridTech's Tom Suprock. "They won't be able to see it from the clubhouse because it's virtually invisible, but the geese can see it," he notes. "The geese will swim back and forth for hours looking for a hole in the fence." It irritates the birds and causes them to move somewhere else. Suprock says, noting that the geese netting is considerably more sturdy than standard bird netting used on trees.

His company also markets a similar netting product that is imbedded in the ground to thwart burrowing rodents. It's being used under the runways at O'Hare Airport in Chicago.

Trapping—To trap pesty animals, "you should be licensed and bonded," according to Jim Williams of Jim's Trapping Service in Sublimity, Ore.

Landscape managers need to make sure they are properly covered for any liability that may arise out of a trapping effort. A neighbor's dog getting caught in a trap meant for a mole, gopher or other pest can be a costly adventure.

Trapping skills are best obtained by hands-on experience, and would-be trappers are urged to attend trapping seminars sponsored by equipment suppliers or extension agencies.

Trapping is not the quickest type of service to offer. "It takes a lot of time," says Williams. It's tough to learn, and it's tough to get the job done correctly—especially if you don't quite know what you are doing. "It's like playing cards; you don't know until it's over whether you've won or not."

When stalking gophers or moles for clients, "I've caught them in a couple of hours and then I've taken a month to catch them," notes Williams. "And when I first did it, I wasn't successful at all. I had a problem with coyotes stealing my traps."

Trapping fees depend on what the market will bear. Some trappers will get a $25 service fee just for setting foot on the lawn, plus $50 for each catch.

"To people who pay $10,000 for landscaping, it's worth it," says Williams, who adds that he receives much less payment for his services in rural Oregon. ("There are a lot of retired people here and I get a lot of fresh vegetables and things.")

Upscale, semi-rural neighborhoods are the best hunting grounds for trappers seeking additional clients, Williams advises. "They go to wealthy areas and the people there don't have the time to catch them—they'll gladly pay 50 bucks apiece for you to catch them."

Be certain of your marketing region. Williams says that word-of-mouth advertising, plus a business card tacked up on a local store bulletin board, brought him a good amount of calls—yet the area was too widespread to make good business sense. "I didn't want to drive 20 miles to check my traps," he concludes.
Extend power equipment life with year-round maintenance

- To extend the lifespan of your power equipment, you must treat the gasoline engines with tender loving care—both before bedding them down for the winter and during the busy season.

It's most important to change the oil before storing the equipment for the winter. "Late fall is the best time to change the oil and check the spark plug to make sure that it will be ready to go in the spring," says James Garthe, instructor in ag and biological engineering at Penn State University. "Don't keep old oil in the engine. Solids, water and acids that have accumulated in the oil over the summer will corrode the engine.

"Change the oil while it's still warm. Contaminants are suspended in warm oil and will drain out. If you wait until it cools, these materials settle to the bottom of the crankcase and solidify into a thick gum."

If possible, remove gasoline from the tank before storing the mower, either by siphoning or by taking off the tank. Consult your owner's manual to determine the best method.

If you can't remove the gas, put a fuel stabilizer designed for small gas engines in the tank and run the mower for a few minutes before storing it. "A good fuel stabilizer can extend the storage life of the gas by up to six months," Garthe contends.

If you keep the equipment in a damp location, consider coating it with a silicon spray before storing it. The silicon will create a film that keeps moisture out and discourages rust.

Covering the equipment with a plastic tarp also helps keep moisture and rodents out. "Mice have been known to chew wires and other engine parts, and even to build nests in the mower," Garthe notes. A plastic tarp will discourage these pests more than cloth, which mice chew up for nesting material.

**During the season**—The lifespan of a small gasoline engine is also directly related to routine maintenance performed on it during the operating season. A few simple procedures that are easy to perform and take very little time can extend engine life, according to Briggs & Stratton.

Over time, component parts will wear out or need replacing. It is important to use genuine parts. They will help keep your engine in top performing condition.

All gasoline-powered engines require proper fuel and lubrication. They also need air for full power delivery and adequate ventilation to prevent overheating.

**Maintenance tips:**

**Lubrication**—Change oil regularly after 25 hours of operation. Many professionals change oil as often as at the end of each working day. Use a high grade detergent automotive oil—30 weight is highly recommended when operating in temperatures above 40 degrees.

Fill to the proper level indicated in the manufacturer's maintenance instructions, being careful not to overfill. Check oil level every time you add gasoline.

"The wrong oil shortens your engine's life by causing overheating and excessive wear on valve guides, seals and main bearings," warns Garthe. "Use high quality engine oils containing additives that buffer corrosive acids generated during fuel combustion."

**Fuel**—Use clean, fresh unleaded gasoline. Using lead-free gas slows combustion deposit build-up and contributes to a cleaner environment.

**Air**—Clean air is needed to mix with gas for optimum combustion and power; it is the lifeblood of engines.

Large capacity pleated paper air cleaners help keep the engine clean. Proven for years in automobiles, pleated paper air cleaners offer small engines unbeatable protection and convenience. And service is a snap: remove and replace just like an automobile air filter. Again, it is important to replace with genuine parts.

"If the air filter is dirty, minute particles of silicon eventually can get into the internal moving parts, wearing them down and pitting them," Garthe notes. "A dirty air filter also keeps air from getting to the engine and affects the air-fuel ratio that governs combustion. The engine has to work harder, wasting energy and fouling the spark plug with deposits."

The oil foam air cleaner also offers good protection. Replace whenever it appears very dirty.

**Blower housing**—Dirt and debris can enter the engine's blower housing and clog the cooling fins, causing high engine temperatures. If the temperature rises too high, internal parts can be damaged. Prevent grass and debris build-up by removing blower housing and cleaning the area.
Hydraulic seeding: from highways to home lawns

Benefits of this fast, efficient seeding method can be helpful in golf course renovations, too.

by Ron Hall
Senior Editor

Hydraulic seeding is the process of mixing seed, fertilizer and fiber mulch with water in correct proportions inside a tank and then spraying the slurry onto a prepared soil surface.

Many landscape contractors refer to the process as “hydroseeding.” But like Kleenex and Xerox, two other brand names that came to represent categories of products, the name Hydro Seeder is registered to a specific company, the Finn Corp., which made its first Hydro Seeder in 1953.

Whatever you call it—hydraulic seeding, mulching or grassing—it offers advantages over mechanical seeding in many turf and landscape projects. Hydraulic seeding, say its proponents:

- is faster and usually requires less labor because seed, fertilizer and mulch are applied at the same time. (Other amendments such as lime or biosimulants can be added too.)
- provides a more uniform distribution of seed, fertilizer and mulch.
- usually results in faster seed germination.
- offers a higher grass survival rate.
- reduces soil erosion.
- puts seed in difficult areas like slopes, berms, and ditches.

Hydraulic seeding reportedly gained its

Hydraulic mulchers available to the green industry

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<thead>
<tr>
<th>COMPANY</th>
<th>MODELS</th>
<th>FEATURES</th>
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</thead>
<tbody>
<tr>
<td>Badger Associates</td>
<td>Turbo Turf: 8 different size units ranging from the HS-50, 50-gal. skid-type unit, to the HS-1600-ZX, 1600-gal. unit.</td>
<td>The HS-1000-XPW 1000-gal. poly tank, skid-type system; 16 hp B&amp;S Vanguard or Kohler Magnum engine with electric start; 4&quot; x 4&quot; high-volume centrifugal pump; 100 ft. of 1/4&quot; ID hose, hose holder and five nozzles.</td>
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<td>Bowie Industries, Inc.</td>
<td>7 different model sizes ranging in working capacities from 250 gals. (the “Baby Bowie”) up to 3,000 gals. (the “Bowie Imperial 3000”)</td>
<td>Victor 1100 Hydro-Mulcher with 1125-gal. tank (steel plate with epoxy resin coating on inside); Wisconsin W4-1770 air-cooled engine; 2300 STD Bowie pump; enclosed shredder bar; 2 agitators to keep slurry homogenous.</td>
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<td>Easy Lawn Inc.</td>
<td>2 models: HD6001-60 with 600-gal., polyethylene tank and the HD3002-30 with a 300-gal. polyethylene tank.</td>
<td>Spray range of 100 ft.; the HD3002-30 gives about 4,000 sq. ft. coverage; the HD6001-60 about 8,000 sq. ft. coverage; multi-tube jet agitation; 100 ft. of clear braid hose; manual hose reel with greaseable ball bearing swivel.</td>
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<td>Finn Corporation</td>
<td>7 models with working capacities from 250 gals. to 3,000 gals.; most popular models the T90 (800 gals.) and T120 (1,000 gals.)</td>
<td>T120 Series II Hydroteeners feature new in-line clutch/pump assembly (&quot;Clump&quot;) that boosts hp and rpms, increasing application distance 20% while also allowing use of bulkier materials; powered by diesel Kubota 1703; discharge distance for both is 180 ft.</td>
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<td>Reince Inc.</td>
<td>Full complement of Hydrograsers ranging in size from HG-5H with a 500-gal. working capacity to the HG-30GX with a 3000-gal. working capacity.</td>
<td>Model HG-10GXA with 1000-gal. working volume; 130 feet spray range; air gap fill; double-valved fill pipe for hands-free filling; exclusive Tilt-Load fiber feeder and mulch grinder; 35-hp air-cooled gas engine; dual agitation system with &quot;Hydro-Jets&quot; and paddle mixers; stainless steel nozzles.</td>
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<tr>
<td>TGMI, Inc.</td>
<td>Aqua Mulcher 400, 400-gal., portable unit will hydromulch 4500 sq. ft.; (also a distributor for Bowie units).</td>
<td>All steel construction; paddle agitation; hydrostatic agitator drive; centrifugal pump; clutched pump drive; steel tank with epoxy interior coating; spray distance 90 ft. from end of hose (190 ft. total).</td>
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<tr>
<td>The Brothill Co.</td>
<td>The TurfSeeder with a 150-gal. poly tank and the Turfmaker with a 200-gal. steel tank.</td>
<td>The Turfmaker: mechanical agitation; Bowie positive displacement pump with Honda engine; clearwater hose flush system; bale loader, hose reel for transportation and hose storage; two nozzles.</td>
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first commercial use when the Connecticut Highway Department outfitted a tank with a recirculation-type agitation system and applied a slurry of grass seed and peat moss to slopes in the 1930s, says Walter Reinecker, Reinco Inc. A landscape architect in West Virginia saw obvious advantages to use the concept in his hilly state too, explains Reinecker.

But hydraulic seeding didn't really gain widespread use until America's highway-building frenzy began just after WWII. Large hydraulic seeders were used to seed mile after mile of highway roadsides, including areas that would have been impractical, or even dangerous, to seed mechanically. They saved untold expense and labor because they could spray thousands of square feet in minutes.

America's highway-building era is basically over, but uses for hydraulic seeding—if not the size of the projects themselves—continue to grow, particularly for landscape contractors and for golf course seeding and renovation. While soil reclamation and erosion control remain the two biggest markets for hydraulic seeding, landscape contractors now regularly use it, often for areas as small as individual home lawns. Golf courses and sports turf, particularly football and soccer fields, can benefit from hydraulic seeding too.

Smaller is better—Recognizing this trend, several manufacturers entered the market with smaller, less expensive units about a decade ago or less.

Ray Badger, Badger and Associates, New Brighton, Penn., says landscape contractors even using smaller hydraulic mulching units can cut their labor costs compared to mechanical seeding. "And a lot of times they can charge a premium for hydraulic seeding," he points out.

Established companies like Finn, Reinco and Bowie expanded their lines, offering products that are more suited and affordable to the landscape market, too.

Cost is obviously a consideration, but a landscape contractor should focus primarily on productivity, says Walter Butman, the Finn Corp. Does the hydraulic seeding unit possess sufficient capacity and power to most efficiently perform the tasks that the contractor is planning for it?

Bob Person, president of TMGI, Inc., Cincinnati, advises contractors to compare the construction (stainless or plastic tanks) of comparably sized units and operating features. He says units with identically sized tanks may have different capabilities. This may be most obvious when it comes to the amount of mulch they can hold and dispense. This often determines the success or failure of a seeding project, particularly if environmental conditions turn against the contractor.

Person likens it to buying a pickup truck. Although the bed size of, for instance, a Ford pickup is the same for half-ton, three-quarter-ton and one-ton models, the work capacity of the one-ton model is obviously much greater than the other models.

That's why each contractor must review the type and size of the projects that they plan to use their units for, and then carefully check their requirements against each unit's suitability. All manufacturers provide literature that outlines the capabilities of their hydraulic seeders, but prospective buyers shouldn't be afraid to ask questions. Nor should they hesitate to gather information about the costs of hydraulic seeding. Again, manufacturers can help.

Reinco, for instance, offers a free publication titled "Hydrograssing and Power Mulching Cost Analysis." It details the current methods available for hydrograssing, explains the positives and negatives of each, calculates the cost per square foot and suggests the best available process for a variety of applications. Charts and tables are included, along with an overview of machine selection.

Equipment options that make the seeding process easier include electric hose reels, extension hoses, mulch shredder bars and accessory nozzles.

Established manufacturers in the hydraulic seeding market also offer mulch spreaders, crimpers/discs, tack applicators (Reinco), and an AEM Spreader to transport and place large quantities of bark mulch, compost or similar product (Finn).
Affordable liability coverage

If you have liability insurance, don’t assume it’s the best you can get. And don’t assume that high premiums are unavoidable.

by Bess Ritter May

- Premiums for most small businesses have risen drastically in the past few years. If you need affordable liability insurance, you have to know how to choose an agent, company and policy. The organization and safety conscious nature of your company also count. Here’s a look at the key points to consider when buying liability coverage.

Agents and brokers—Agents represent one company, whereas brokers represent many companies which offer different types of coverage at different rates. Choose a broker carefully. You don’t want a broker who will pressure you into purchasing coverage you don’t need. Nor should you choose a broker who “churns” or “clean sheets” applications.

“Churning” occurs then the agent or broker urges a client to drop a good policy to earn the broker a substantial first year commission.

Other unacceptable practices include the “buy now because you may not be able to get such a great policy later” argument, and doubletalk whenever you question policy specifics.

What you should know—Exactly what is covered? Details include: medical payments, product liability, advertising liability, personal injury, contractual liability.

Insist on a “certificate of insurance” from the broker. This is a type of broker’s malpractice insurance. It guarantees that if he or she fails to follow through on a binder or omits some critical detail concerning your coverage in their report to the insurer, you can collect through your broker’s insurance.

Insist that the agent/broker inspect your entire business premises, including the basement, storage areas and parking lot. Do this before buying, so inspectors can identify hazards and explain how correcting them can bring a lower rate.

Items of concern can range from the lack of fire detectors in storage areas to pot-holes in the parking lot.

Insurance inspectors will also offer advice concerning common sense safety practices such as clean, dry floors.

The lawn care industry has a feature which other business don’t have: the use of pesticides. Be sure to state—at the time of application—exactly how the chemicals you use are stored and applied. Describe the expertise of the employees who do this work. When you obtain approval from the carrier, you won’t be surprised to learn later that a claim is not going to be honored.

“Self insure,” by assuming part or all of the smaller losses. Most insurers like this because it can cost them as much as $500 or more to process a $100 claim.

Cancellation clause—Check your new policies cancellation clause. This is vital since some companies will actually drop clients who file too many unprofitable claims or transgress in some other way that causes a profit loss for the company.

Insurers do not have to give you a reason for cancelling after as little as five days’ notice. So negotiate that clause before you buy, and bargain for time. You will need it to line up new insurance.

Be sure your liability insurance is written so that limits apply on a “per claim occurrence” basis. If you are found responsible for an “incident” which results in the injury of more than one person on one occasion, and are insured on a “per claim” basis, the company is liable for all resulting injuries which occurred at the time. Under a “per occasion” arrangement, the company will guarantee only one payment regardless of the number of persons injured.

Be sure that all workers know and understand the terms of your liability insurance. Post a copy in a prominent space and mark in red all claims which might nullify or reduce your coverage. Insist that all incidents be reported promptly. Delegate all such matters to one competent employee.

Employee ignorance of the policy terms or an error in reporting could someday result in bankruptcy.

Don’t make enemies—Always be courteous to everyone on the payroll or to anyone who may visit the premises, and to all business associates, and avoid arguments. You never know when a misunderstood word or deed will escalate into a serious complaint involving your liability insurance that might have been forgotten with softer treatment. Insist that all employees develop the same gentle attitude. Be gentle in your treatment of them as well.

With your attorney’s help, write up a list of steps you will have to take in the event of a claim. This is done to sure the company will not put you off or invoke a “reservation of rights” clause in order to deny protection.

One example is the requirement of most companies that prompt notice be given on any claim or even on some unusual circumstances which might result in a claim. Check with your attorney again before actually filing for a claim, especially if it is a big one. The insurer is bound to look for loopholes.

The author is a freelance writer based in Philadelphia.