Bernhard and Company

Product focus:
Bernhard and Company grew from the export division of Jeffery Bernhard & Sons — a successful family firm focusing on commercial landscaping and horticulture for more than 50 years. Responsibilities included the construction and maintenance of golf courses and it was here that Bernhard’s founder, Stephen Bernhard — an experienced agronomist and horticulturist — developed a special interest in the technical issues surrounding the cutting of grass. In particular, the effect that grinding technique had on mower maintenance and turf quality.

Stephen took up the challenge of inadequate reel and bedknife grinders, and redeveloped a range of precision grinding systems, specifically to meet the practical demands of busy maintenance workshops. The result was the redesigned Express Dual reel grinder and the Anglemaster bedknife grinder.

Fast, simple and accurate, they transformed workshop practices and boosted productivity. Moreover, they produced a cleaner cut causing less damage to grass, improving turf health, disease resistance and playing quality.

Manufacturing facilities:
“Made in England” — Bernhard and Company have been manufacturing reel and bedknife grinders since the late 1880s (formerly through Atterton and Ellis).

Training:
As part of our drive to increase knowledge throughout the market, Bernhard and Company works closely with end users on the operation of our equipment. We offer workshops, service schools and educational seminars throughout the country. Contact your local Bernhard dealer to find out more about attending one of these useful events.

Major product lines:
Express Dual Spin Grinders — Renowned the world over for superb grind quality at lightning speed with simplicity, ease of use and exceptional reliability. Express Dual offers major benefits to your operation by reducing maintenance costs and downtime while improving the health of your turf.

Our unique auto-cut provides accurate finish, eliminates need for lapping and extra relief thereby dramatically reducing maintenance costs and improving the health of your turf.

Anglemaster Bedknife Grinders — Developed to meet the needs of the most demanding user, grinding all bedknives to within one thousandth of an inch. With its fine tolerances and ability to produce any desired angle, Anglemaster ensures that the reel and bedknife work in perfect harmony.

Rapid Facer — Designed to quickly restore the front face of bedknifes, it enables mowers to spend more time on the course than in the workshop.

Rapid Relief — The fast way to restore relief on reel blades.
Cleary Chemical Corporation

Product focus:
Cleary Chemical Corporation is a trusted manufacturer and supplier of quality plant protection products to the golf market and entire green industry. For over 65 years, Cleary has focused its resources on the research and development of cutting-edge technologies for the control of pests and diseases. Golf course superintendents across the country have come to rely on Cleary Chemical’s technical expertise in solving problems.

Personnel:
While the industry continues to consolidate and reduce personnel, Cleary has seized the opportunity and more than doubled personnel where it counts: technical service, sales, and sales support. Successfully satisfying customer needs is a constant in this business. Cleary’s Solutions Programs approach combines cutting-edge technology and experienced personnel to work with the superintendent for quick, cost-effective solutions to a broad range of complex plant protection problems.

Major product lines:
3336 Plus™ fungicide. New 3336 Plus fungicide with ClearTec™ Activation Technology is the latest addition to the Cleary portfolio of highly effective, broad-spectrum turf fungicides. Cleary has re-engineered its widely used Cleary’s 3336™ fungicide to last up to 50 percent longer under most golf course conditions. With the addition of this innovative, new process — ClearTec Activation Technology — 3336 Plus™ controls turf diseases significantly longer on your fairways. The same great, broad spectrum, economical disease control you count on from 3336 and longer lasting control — as much as 50 percent.

Endorse™ fungicide. Endorse™ fungicide, with its unique mode of action, attacks turf disease through both contact and penetrant translaminar systemic activity and can be used in either a preventative or curative management program for foliar and crown related diseases. This makes Endorse an ideal rotational or tankmix partner with other fungicides like Cleary’s 3336 and Spectro for the control of major diseases such as brown patch, anthracnose and snow mold. Cleary also supports a 2ee recommendation for the suppression and short-term control of fairy ring, a difficult to control disease.

26/36 Fungicide™. 26/36 Fungicide is another new, broad-spectrum fungicide available to the golf market from Cleary. It is a unique formulation of two proven ingredients, thiophanate-methyl and iprodione, with benefits that include long-lasting disease control without growth regulation.

26/36 is a great summer replacement product for the DMIs, increases the length of disease control up to 21 days and lessens concerns for resistance, as well.

Other key turf products include Spectro90WDG™, Alude™, Protect DF™, Spotrete F™ and Nutrigrow Magnum™.
Dow AgroSciences

Dow AgroSciences delivers innovative technology that exceeds market needs and improves the quality of life of the world's growing population. We are a wholly owned indirect subsidiary of The Dow Chemical Company. That strength and stability plus the passion of more than 5,500 of the industry's most talented people ensure we meet our customers' needs. We will continue to pursue innovative solutions using science and technology and always look ahead and evolve to meet the ever-changing needs of our customers and the demands of new marketplaces. This is clearly evident in the examples of innovative products we have recently introduced, and the several new products and technologies in our pipeline. That's our commitment to the industries we serve and most importantly, that's our commitment to you.

Our key golf industry products include the following:

**Dimension** specialty herbicide — Provides premium season-long pre-emergence control of spurge and oxalis and other grassy weeds, along with early post-emergence control of crabgrass. Never stains and won't harm turf. Great for use on overseeded turf.

**Spotlight** specialty herbicide — Powerful yet selective post-emergence herbicide for improved control of clover and other hard-to-control weeds. Shows visible activity within 48 hours; ideal for tank-mixing.

**MACH 2** specialty insecticide — At an easy-to-remember 2-pound rate, provides unbeatable control of all grubs all season long. Costs less per acre than other leading grub control products. Performance is guaranteed.¹ Wide window of application (apply early and up to second instar) provides route scheduling flexibility. Does not require immediate irrigation; controls lepidoptera, too.

**Eagle** 20EW specialty fungicide — A liquid systemic fungicide for preventive and curative control of 19 turf-destroying diseases such as dollar spot and brown patch. Available in convenient, easy-to-use containers ideal for use on fairways, greens, roughs and tee boxes as well as landscape ornamentals.

Technical support, sales, training and customer service:

Seventeen sales representatives, five technical sales representatives, three sales managers, four product technology specialists and various product and marketing specialists provide stewardship, training and solutions to formulators, distributors, university researchers and end users nationwide. Specimen labels and material safety data sheets are available from the Customer Information Center or online at www.dowagro.com. Publications include product fact sheets and Panorama™, an eight-page newsletter for professional turf and landscape managers.
Floratine

Product focus:
Floratine focuses on advanced technology, environmentally responsible products and scientifically sound methods to assist superintendents in growing strong, stress resistant turf. The innovative, premium quality products are designed to address chemical, physical, and biological shortfalls in the soil and to provide foliar nutritional and biostimulant supplementation to meet the essential requirements for turf strength.

Manufacturing facilities:
Floratine's headquarters and manufacturing is in Collierville, TN, a suburb of Memphis. Technical support staff are located strategically throughout the United States and abroad.

Technical support, sales, training and customer service:
Floratine maintains a technical support team of 10 agronomists and scientists. Its technical services division oversees agronomic and product use training required for more than 100 field representatives associated with 50 independent distributorships in North America and more than 23 other countries. Floratine headquarters staff and distributors offer direct, in-depth service to clients.

Major product lines:
- Astron, Per’4’Max, Perk Up and companion biostimulant-nutrient products are balanced phytotoxic chemical and antioxidant products for stress management.
- ProteSyn and Floradox Pro are advanced design amino acid-based strength builders and recovery tools.
- New Carbon Power products, including phosphate-based Fight, deliver organic-based high efficiency N-P-K with proprietary crenic saprin technology.
- Floratine offers a range of soil applied materials to address nutrient availability (CalpHex, Maxiplex, TriCal), air and moisture management (Pervade, Retain, Oxyflor), and other soil challenges.
Milorganite

**Product focus:**
Milorganite is an organic nitrogen, slow-release fertilizer that can be safely applied to plants without the risk of burning. The no-chemical-salt formula provides long-lasting results, does not easily leach and yields high-quality turf. Milorganite contains 75% organic matter by weight and releases its nutrients slowly. Unlike the iron salts some fertilizers contain, Milorganite's 4% iron is organically complexed and readily absorbed by plants. Milorganite is priced like inexpensive iron salts, but acts more like expensive synthetic chelates, so it even works in poor soils, regardless of soil pH. Milorganite won't stain concrete.

**Manufacturing facilities:**
Milorganite organic nitrogen fertilizer is the result of biological and mechanical processes that use naturally occurring microorganisms as their source. Milorganite is a value-added product produced through Milwaukee's waste-water treatment process.

**Major product lines:**
- **Milorganite 6-2-0 Classic:** Sized at SGN 160, this fairway-sized granule quickly drops through most turf canopies to rest on the soil surface until rain or irrigation activates its nutrients.
- **Milorganite 6-2-0 Greens Grade:** This is the same nutrient package as Milorganite Classic but with a SGN of 90 granules. The particles are small enough to fall through most canopies of close-cut turf.

Milorganite is available in both 1,000- and 2,000-pound heavy duty bulk bags.

**Technical support, sales, training and customer service:**
For all customer-related issues please contact Milorganite at 800-287-9645.
Par Aide Products Co.

Product focus:
Since 1954, Par Aide Products Co. has been providing the golf course industry with a superior line of golf course accessories. For a product to earn the Par Aide name, it must make superintendents’ jobs easier, help them do it better or perform a service that makes them look good to the golfer. When describing our products, our favorite words are long-lasting, maintenance-free, dependable and value. We take great pride in having grown our full line of golf course accessories by listening to our customers and through innovation and acquisition.

Embroidered flags
Turn to Par Aide when high quality and exceptional service are what you demand for embroidered flags. We took flag embroidery to the next level by utilizing the exclusive “reverse bobbined” stitching, which embroiders your logo in reverse on the backside of the flag. This will give you extraordinary detail on both sides of the flag.

Our new line of embroidered flags is constructed using 400-denier material with reinforced stitching. This material is more durable and less likely to “pucker” when embroidered upon. Our flags are made of UV-protected nylon for maximum fade resistance. They are available in convenient tube-lock swivel or brass grommets. Finally, we are dedicated to providing the fastest turnaround time on embroidered flags in the industry.

Green & Whites
Our new Green & White Directional Markers are easy to place and remove. These multi-purpose markers are extremely helpful in guiding golfers around the course and in the right direction. Each marker is made from an 8-inch, maintenance free, recycled plastic white stake with a 4-inch hunter green vinyl cap, and a sturdy stainless steel 5/16-inch spike. Some of the many uses include directing foot and cart traffic, protecting wet areas and new sod, marking ground under repair, etc. The Green & White Directional Markers are sold in quantities of 25 and include a handy carrying/storage bucket. The bucket keeps the markers clean and easy to transport.

Accuform Ace II
The redesigned, patented Accuform Ace II Bunker Rake maintains the exceptional quality of all Accuform tools. The ends of the rake are tapered to reduce unsightly furrows left by rakes with straight ends. Offered are two redesigned heads in 17-inch and 25-inch lengths. They are made of impact-resistant, high-density polyethylene. Each pass of the rake blends with the pass before and after, leaving a more consistent playing surface. Smoothing out our ultra-lightweight design has made this rake better than ever.
Parkway Research is a basic formulator and producer of turf specialty chemicals and fertilizers, including Manni-Plex foliar micronutrients, Big Foot spray colorants, Consan turf fungicide and algaecide, Neo-Tec nematicides, and Noculate greens-grade fertilizers. All of Parkway's products are guaranteed to deliver unparalleled results to the turfgrass professional. Parkway Research is a division of Brandt Consolidated, Inc.

**BIONX**

Designed to address the needs of the modern golf course superintendent, BIONX, an EPA-registered fungicide and insecticide, functions at its best when used as a component of a disease and pest control plan.

**Stand-alone fungicide**

As a fungicide, BIONX wets the protective membrane of the fungal mycelia, sporangia and spores, breaking it down and exposing them to the drying effect of the atmosphere. Drying of the fungal mycelia and the surrounding leaf tissue will prevent further infection. BIONX has stand-alone activity on turf fungal diseases such as Anthracnose, Dollar Spot and Fairy Ring.

**Fungicidal tank mix partner**

BIONX may be tank-mixed with most commonly used turf and ornamental fungicides and will not only provide its unique fungicidal action, but may enhance the overall efficacy of the mix.

**Turf insecticide**

Soft-bodied insects such as army worms are protected by a water repellant layer that loses its effectiveness when BIONX comes into contact with it. The insects are then exposed to loss of body fluids, causing death.

**Ornamental pest control**

Another effect on some insects is the penetration of the ultra-low surface tension fluid into the respiratory organs, thus suffocating it. BIONX has activity on insects such as whiteflies, aphids, mealy bugs and leafhoppers, as well as various types of mites.

**Super surfactant technology**

While the active ingredient for the EPA-regulated controls on the BIONX label is Sodium Tetraborohydrate Decahydrate, BIONX base ingredients are a unique blend of organic, environmentally friendly surfactants, and cold-pressed orange oil. When tested against popular wetting agents and adjuvants, BIONX exhibits superior wetting and spreading properties.

**ECLIPSE**

Greens Grade Black Layer Control

ECLIPSE is formulated to attack Black Layer from four angles:

1. **Calcium Silicate**

   Exposing the clay particles to Calcium will cause the Sodium, Iron and Sulfur to be exchanged by the Calcium because of the stronger attraction, allowing the Sodium to be easily leached below the root zone where it is flushed away. Calcium plays a key role in displacing Iron in the Iron Sulfide complex.

2. **Activated Carbon**

   The activated carbon in ECLIPSE is designed to adsorb the Hydrogen Sulfide created in the Black Layer process.

3. **Beneficial Soil Micro-organisms**

   ECLIPSE improves soil structure, percolation, nutrient cycling and disease suppression. The use of these microbes will also inhibit the production of sulfide reductase.

4. **Wetting Agent**

   ECLIPSE improves water movement throughout the soil profile, and will help to reduce the anaerobic conditions, and improve root growth.
POLYON® controlled-release fertilizer provides predictable results

POLYON® controlled-release fertilizers provide golf course superintendents the ultimate in predictability. Only POLYON fertilizer uses the patented Reactive Layers Coating™ process, which encapsulates fertilizer granules in a durable polymer membrane.

Through a reaction known as Solute Concentration Gradient Permeation, each coated granule slowly and consistently releases nutrients to the soil when activated by temperature. By releasing gradually and consistently, POLYON controlled-release fertilizer assures predictable turfgrass feeding.

Unlike other fertilizers, POLYON controlled-release fertilizer is not subject to variables such as moisture levels, uneven particle size, microbial activity or soil pH.

The consistent, gradual performance of POLYON fertilizer enables users to spend less time and money fertilizing. POLYON can often deliver season-long fertilization with just one application. For more information, call 1-800-422-4248 or visit www.polyon.com.

PRECISE® Acephate makes a good insecticide better

Pursell Technologies recently introduced an advanced delivery system for golf course pesticide applications.

PRECISE® Acephate is a dry flowing, easy-to-handle granular formulation. The patented PRECISE coating technology allows slow, controlled release of the pesticide over an extended period of time, which provides increased application flexibility and product efficacy, along with greatly enhanced user safety.

Acephate has long been a popular product for controlling a wide variety of damaging insects in turfgrass, such as mole crickets, fire ants, armyworms, chinch bugs and others. PRECISE Acephate offers an improved formulation of acephate.

By creating a coated granular form of acephate, PRECISE keeps the pesticide from coming in contact with users and it reduces acephate’s distinct harsh smell. Granular PRECISE Acephate is also much easier to handle and more environmentally friendly, with no risks of hazardous spills or spray drift.

PRECISE Acephate promises to be a beneficial and popular option for superintendents everywhere. For more information, call 1-866-846-3348 or visit www.aboutprecise.com.
Rain Bird Corporation – Golf Division

Product focus:
For more than 70 years, Rain Bird Corporation has been a world leader in the irrigation industry. As seen in new product development, current product offerings and marketing and sales programs, Rain Bird promotes the efficient use of water in the most precise manner possible, minimizing waste. From cutting-edge products like the new Golf Pump Station to Version 5.0 Central Control software, Rain Bird’s Golf Division manufactures products that can be found on golf courses in more than 130 countries on six continents.

Rain Bird’s Golf Division highlights its commitment to resource management and conservation through advanced product design as well as on-going sponsorship of the GCSAA Environmental Leaders in Golf Awards, which salute the exemplary work being done by superintendents to preserve, conserve and protect natural resources. In addition, Rain Bird is also an active contributor to the Golf and the Environment Initiative Program through the Center for Resource Management.

Manufacturing facilities:
Headquartered in Tucson, AZ, Rain Bird’s Golf Division offers worldwide distribution and service to its distributors and customers.

Technical support, sales, training and customer service:
Rain Bird’s newest products offer advanced technologies to help the golf world wisely conserve and manage its resources. For distributor, technical support, training or service questions, please contact 1-800-RAINBIRD or visit www.rainbird.com.

Major product lines:
Demonstrating its innovative roots, Rain Bird was the first to develop computerized central control and the first to install a centrally controlled irrigation system on a golf course. Today, Rain Bird Corporation’s Golf Division manufactures a wide range of irrigation products for golf courses that cover the entire spectrum of irrigation — from reservoir to rotor. Rain Bird products include pump stations, EAGLE™ Gear Drive Rotors, field controllers, map-based central control irrigation systems, decoders, swing joints, flow meters, filtration systems, valves and irrigation accessories. Rain Bird central control and pump station components are serviced and supported by a comprehensive Global Service Plan (GSP). These products are sold worldwide through an extensive network of specialty irrigation distributors.

As the world’s leading manufacturer of irrigation products, Rain Bird continues to set an example by demonstrating its commitment to support golf course professionals.
SePRO Corporation

Product focus:
Cutless® Granular Landscape Growth Regulator is a new systemic landscape growth regulator for shoot growth suppression in landscape ornamentals, resulting in more compact growth form and reduced trimming, in an easy-to-apply granular formulation. Expected plant responses:
- Reduced trimming/pruning frequency
- Increased plant density or compact growth habit
- Shoot growth suppression
- Decreased internode length
- Darker green foliage
- No negative flowering response
- Plant stress conditioning effects associated with PGRs

Cutless® Turf Growth Regulator is a unique turf growth regulator that enhances the quality of fine turfgrass. Cutless improves turfgrass playability, reduces mowing time, reduces clippings, improves water utilization, makes turf more wear resistant and improves turfgrass color and appearance. On cool-season turfgrass, Cutless can shift the competitive balance from Poa annua-infested turf to desirable perennial grasses.

R&D focus:
The SePRO Research and Technology Campus (SRTC) greatly expanded SePRO laboratory and field research capabilities while providing high quality technical support for SePRO’s future growth. Located in Whitakers, NC, the SRTC houses an extensive six-building aquatic research and technology complex on a 410-acre site complete with laboratories and 11 acres of specialized aquatic research ponds and mesocosms. The center incorporates an aquarium, mesocosm and field research studies, laboratory assay support, and growth room screening for evaluating existing and new products. In the future, the facility could also accommodate turf and landscape ornamental research capabilities and distribution center for SePRO's growing product line.

Major product lines:
- Cutless® Granular Landscape Growth Regulator
- Cutless® Turf Growth Regulator
- Professional ornamental fungicides, plant growth regulators and insecticides
- Professional aquatic herbicides and algacides
- Humane Canada goose control