Michael Bonallack, centre, talks to Rolawn staff at the recent ETME exhibition.

BARENBRUG UK LTD

One look at the S.T.R.I. Turfgrass Seed booklet and another at the bewildering array of grass seed mixtures available from seed houses show how much grass breeding has advanced over the past twenty years or so. The selection and evaluation of new varieties now means that the grass seed buyer can be very specific in his choice of species and variety to suit his own particular requirement and environment.

For example, some varieties of perennial ryegrass do very well heavy duty wear such as soccer pitches, but are much poorer for finer uses. Nowadays it is not just a question of deciding which type of grass species to have - choice of variety within each species has become much more important.

Barenbrug has been a market leader in the breeding and selection of amenity grasses for many decades. The Barenbrug breeders spend many years carefully crossing and evaluating potential varieties before submitting them for official trials. Many thousands of lines have to be screened to produce one new variety. The care and attention devoted to breeding has been well rewarded in the performance of many Barenbrug varieties in the S.T.R.I. trials.

In perennial ryegrasses both Barclay and Barry are established Barenbrug varieties, with Barrage topping the new variety list for heavy duty use. With chewings fescue, Barfalla, Wintergreen and Barnica are on the list, while Baruba is an exciting new variety shortly to be released. Barcrown is a new slender creeping red fescue which promises to outperform every other variety on the list. Under brown top bents, Bardot has become a standard variety for those wishing a better quality bentgrass turf than Highland. And finally Baron which even after 20 years is still the world's best selling Poa pratensis.

With this stable of amenity grass varieties, it is not surprising that Barenbrug UK is set to become one of the leading suppliers of quality grass seed to the UK market.

For further information on any of the varieties or company, please contact Anthony Campson (Managing Director) or Jonathan Turner (Marketing Director) at Barenbrug UK Ltd, Rougham Industrial Estate, Bury St Edmunds, Suffolk.
Everyone's better off with Barenbrug.

The breeders of winning grass varieties such as 
Barclay, Barrage, Barry, Baron, Bardot, Barcrown 
and many more.

For further information on these and all your 
grass seed needs call us.

Barenbrug UK Ltd, PO Box 2 
Rougham Industrial Estate 
Bury St Edmunds, Suffolk IP30 9NW 
Tel 0359 70766 Fax 0359 71021
AVONCROP LTD

AVONCROP Ltd, the well known and respected suppliers to the Commercial Horticultural Industry, have pleasure in announcing their move into Amenity Horticulture with the formation of Avoncrop Amenity Products.

Avoncrop Amenity Products will operate out of the existing Avoncrop Ltd., premises at Sandford, near Bristol where extensive warehousing and transport facilities are available to give Customers a first class service.

Avoncrop Ltd., with their many Main Distributorships and extensive range of Commercial Horticultural Products already in stock enables the new business to make much of this available to the Amenity Customer along with leading brands of Amenity Chemicals, Fertilisers, Grass Seed Mixtures, Top Dressings, Sportsground Equipment, Line Marking Materials, etc.

Avoncrop Amenity Products “Customer Service Policy” is well backed on the Sales and Technical front with the expertise of Mr David Padfield and Mr John Palfrey who have recently joined Avoncrop and will be available to discuss any enquiries you may have.

FAIRFIELD TURF

FAIRFIELD Turf have increased production to over 800 acres to cater for the exceptional demand for their products:

Flora Turf. This new product has been well received by the trade and especially by local authorities and architects looking to create small conservation areas, and to provide attractive swathes of colour during the growing season.

Supersport Turf. This product keeps improving, and is now, thanks to the latest ryegrass cultivars like “Numan”, a much finer looking turf requiring less mowing due to the dwarf habit of this ryegrass.

For utility areas, tees which are difficult to keep grass cover on, for construction of revetments (bunker sides), ditch banks, Supersport is the ideal turf.

Superturf. Is increasingly popular as a tee’s turf and for aprons and bunker slopes. The smooth stalk meadow grass contained in Superturf is extremely persistent in growth habit, and is able to shoot again from its rhizomes which is particularly advantageous when used on tee areas. Superturf is also well adapted to areas where drought and shade can be a problem.

Superfine Turf. Is grown from a fescue/bentgrass seed mix, providing a superb putting surface for golf and bowling greens. This grade of turf is treated against invasion by poa annua. Production is available now, and we expect demand to be very heavy for Superfine Turf this Spring.

STEWART AND CO.

STEWART & Company Seedsmen Ltd were traditional Seedsmen when they were established almost 100 years ago, as suppliers of flower and vegetable seeds to Estates and Commercial growers throughout Scotland and England.

It was the interest in sport, and golf in particular, of John Forbes, grandfather of the present Managing Director, that led to the development of the Sports Turf division of the Company.

It became apparent a number of years ago, that despite the provision of the traditional Sports Turf Market, any.
real growth would have to come from diversification within the market place best known to the Company. The acquisition of Sportsground Construction Ltd of Paisley, provided the ability to carry out operations as varied as machine work on Bowling and Golf Greens, construction of Five-a-Side Artificial Pitches and Full Size Grass Pitches, as well as Golf Course alterations. Further diversification was announced last week with the setting up of Groundcare Services, a new division within Sportsground Construction, which will supply specialised machinery to the Sports Turf market.

Another dramatic upturn in the fortunes of the Company came after its investment, four years ago, in the York-based company "Inturf", managed by Derek Edwards. This interest in the production of quality cultivated turf, led Stewarts into setting up their own turf farm in East Linton, which has over 340 acres currently under cultivation. Stewarts turf is marketed through the Inturf Group, which has nurseries in East Lothian, York, Grantham and Newmarket. Although no longer traditional Seedsmen as they once were, Stewart & Company do supply their own range of Stronghold Seed and, as Scottish distributor for Mommersteeg International, still supply the Amenity market with a variety of quality grass seeds.

**BRITISH SEED HOUSES LTD.**

There is no doubt that more people than ever before are swinging a golf club and with the Royal & Ancients recent announcement that a further 700 golf courses are required in the UK over the next few years, the picture of golf in this country looks well assured. Over the last 15 years the Amenity Grass Division of B.S.H. have been carrying out a great deal of research and development work concerning new grass varieties as well as trials on different grass seed mixtures. The company are currently sponsoring a heavy research programme at both the Plant Breeding Station at Queens University Belfast and at Abertay -sloth University. Independent grass trials are also being carried out at the Long Ashton Research Station near Bristol and the North Scotland Agricultural College at Aberdeen. The first results from Queens University have recently been introduced with the new low-growing slender creeping red fescue called Logro. Which grows to a height of 10/12 cms and therefore requires the minimum of cutting.

B.S.H. are the main distributors for the Penn range of creeping belts which have performed well in the South of England. Penncross was sown on the greens of the Belfry at Sutton Coldfield some 12 years ago and the greens where in perfect condition for the recent Ryder Cup Tournament. Penncross was chosen for the greens at the St of a Golf & Country Club near Plymouth and more recently this creeping fescue was used at the Colingtree Park Golf Course at Northampton and at Hanbury Manor Hotel Golf & Country Club near Hertford. A major golf project at Mount Juliet in Southern Ireland is currently under construction where Penncross is again being sown on the greens and a fine fescue mixture on the tees and fairways.

While there is a very real need for new golf courses in the UK there is no doubt that the present high interest rates are worrying developers and several major golf projects have been put back for twelve months in the hope that the country's economic situation will improve.
Fairfield Five Star Quality Turf

**Super Fine**
The finest, mature and close-knit turf for Golf Greens and Bowling Greens. Fescue/Bent

**Super Turf**
A fine lawn for Tennis Courts, Cricket Squares, low maintenance, and high quality landscapes. Fescue/Bent/Smooth stalk meadow grass

**Super Sport**
Hard-wearing, evergreen turf for high quality landscapes and sports surfaces. Perennial Rye, Fescue/Bent

Cultivated Turf Suppliers to:
- Sports Ground Construction Contractors
- Local Government
- Landscape Architects
- Landscape Gardeners
- Historic Houses and Castles
- Garden Centres
- Property Developers
- Golf Courses
- Private Sports Clubs & Leisure Centres
- Cricket Clubs

For full details phone or send the coupon to:
FAIRFIELD TURF COMPANY LTD
Fairfield Court, Brookland, Romney Marsh, Kent TN29 9RX
Telephone: (06794) 731

Please send me a brochure and price list
Name
Company
Address

G.M. 3/90
WE MIX WITH SOME OF THE TOP NAMES IN EUROPE

Verdant Grass Seeds offer an outstanding selection of mixtures to meet every conceivable sports and amenity requirement.

Using top European varieties, our mixtures represent the highest quality and the most exceptional value for money in fine turf and outfield grass seeds.

And, when you choose Verdant from Parkers, you can rely on the service, friendly advice and technical support that you’d expect from the largest turf care company in Southern England.

Two of our top value popular mixtures are —

VERDANT No. 1:
A mixture designed to withstand very close mowing whilst producing a dense and prostrate growth habit to ensure a close-knit and even-textured turf.

VERDANT No. 5:
Blended for use when sowing-down new pitches although it is also suitable for renovation work. This mixture establishes very quickly to form a dense, compact and hard-wearing sward.

For literature and more information about other mixtures in our range contact us now.

T. Parker and Sons (Turf Management) Limited, Worcester Park, Surrey. KT4 7NF. Telephone 01-337 7791
CYLINDER MOWERS

Cylinder Mowing started in 1832 with the Buddings Patent pedestrian machine being manufactured by Ransomes in Ipswich. Since then a number of different methods of cutting grass have been developed, all of which have their place. It has to be said though that the cylinder mower is still the most efficient way of cutting grass and of course for fine turf is the only way. In a fast changing world it is often wise to predict what will happen in the future but I am confident that the cylinder mower, although it will be steadily improved, will continue to be the most efficient method of cutting grass for a long time to come.

Since those far off days of the Budding Patent the cylinder mower has developed out of all recognition. Many of the major developments have been pioneered by Ransomes. Take for example the introduction of the first mower with an internal combustion engine in 1902, the first mains driven mower in 1926 and, much more up to date hydraulic driven gang mowers in the 1960s and now, high output machines with electronic control systems. In 1990 the professional user of grass cutting machinery has a bewildering array of types and specifications of machine to choose from.

Whatever area and type of grass needs to be maintained there is a cylinder mower to do the job. For cutting fine turf on greens there is a wide choice of equipment. Fairways in particular in recent years have been maintained to a very much higher standard than in the past. Whether a tractor mounted or trailed machine is required or a multiple unit ride-on is preferred cutting units with multi blade cylinders to give a very fine finish are available. The normal number of knives in cylinders used on golf courses in the UK and Europe is 6 or 8. Our colleagues in the USA very often will specify 11 knife cylinders. The difficulties of coping with undulating fairways have been much reduced with the introduction of floating headed units which float in all directions to ensure that scalping is kept to a minimum and that grass in hollows is cut to the same height as the rest of the fairway.

Cylinder mowing is not restricted to golf courses. Multiple unit machinery with 3 or 5 cutting units hydraulically driven are now commonplace with local authorities and contractors. The efficiency of the cylinder mower, with its relatively high cutting speed and low fuel costs has been fully appreciated by those people responsible for the upkeep of roadside verges, parks and open spaces. With reduced costs constantly being sought to cope with the challenges of Compulsory Competitive Tendering or Privatisation as it is often mistakenly called, the high output multiple unit cylinder mower is often the first choice. The output of these machines is impressive to say the least. Take the Ransomes Motor 350D 5 unit ride-on. Yes it is a lot of money, retailing at over £21,000. When the output of 8 acres per hour is taken into account with each one of those acres only costing

Ransomes Quality Audit Engineer, Mr. Barry Saunders, checking the hydraulic oil pressure while carrying out a quality audit on a triple mower off the production line.
CYLINDER MOWERS

around £1.40 to cut it can be easily seen that the initial purchase price of any product should not be the first consideration. There are very few machines that could reach anything like the cost effectiveness of the Motor 350D.

The manufacturing of grass cutting machinery today is extremely advanced.

In today’s very competitive works designs and manufacturing efficiency must be constantly improved to ensure that the customer gets the right product at the right price.

These investments will inevitably lead to innovations in grass cutting machinery in the future. It is very unlikely though that a better and more efficient way of cutting grass will be found than with the cylinder mower for many years to come, if at all.

RICHARD BISHOP
UK Sales Manager
Ransomes

DRAGON 5 AND 3 GANG MOWERS BY ROCRAFT

The Rocraft Red Dragon is a British designed and manufactured power driven gang mower incorporating a robust frame of high-stress structural steel and a straightforward assembly of simple components which reduce breakdowns and maintenance to a minimum.

The 5 gang unit with a full 11ft 6in width of cut and low power requirement make it an ideal choice for mowing large areas economically with smaller lightweight tractors. The Red Dragon can be attached in minutes to most towing vehicles equipped with P.T.O. drive giving a wide flexibility of choice of towing unit. Transport between sites is made easy by folding the cutting units which can be raised either hydraulically or manually.

FEATURES

- Unlike ground driven mowers the P.T.O. drive will maintain a constant cylinder speed independent of forward speed enabling efficient cutting in the wet when other machines slip.
- Lighter than many hydraulic machines therefore reduces damage to wet ground.
- Automatic tension of independent "V" belt drives to each cutting unit transmits maximum power to the cylinders but provides flexibility to permit slip should obstacles be encountered.
- Full articulation of each cutting unit allows the Red Dragon to follow ground contours on its rear roller.
- A unique fully floating head system is available with full width front and rear rollers to give consistent height of cut over severe undulations without scalping and is particularly suitable for golf course fairways.
- Floating heads can be locked into a fixed head position with a simple lever and front rollers easily removed.
- Quick height adjusters are fitted as standard and make changes simple for those golf courses requiring one machine for both fairway and semi-rough mowing. For finer adjustment screw type adjusters are available.
- A third wheel is available as an option for any specially demanding duties.
- For finer adjustment screw type adjusters are available.

Rocraft Limited

RED DRAGON 5 AND 3 GANG MOWERS

- POWER DRIVEN TO CUT IN THE WET
- SIMPLE TO MAINTAIN—NO COMPLICATED ELECTRICS OR HYDRAULICS
- STRONG CONSTRUCTION FOR LOCAL AUTHORITY WORK
- THE MORE FLEXIBLE HEAD FOR GOLF COURSE CONTOURS
- CHOICE OF FIXED OR FLOATING HEAD
- CHOICE OF 4, 5, 6 OR 8 BLADED CYLINDERS
- CHOICE OF MANUAL OR HYDRAULIC LIFT
- OPTIONAL EXTRAS INCLUDE TRAILER LIGHTING, SPARE WHEEL, ETC.
- OPTIONAL SCARIFIER HEADS
- MANUFACTURED IN GREAT BRITAIN

PLEASE CONTACT US FOR FURTHER DETAILS OF OUR RANGE OF PRODUCTS INCLUDING CHEMICAL & GUN SECURITY CABINETS.

ROCRAFT LIMITED
ENERGLYN
CAERPHILLY
MID GLAMORGAN CF8 3TE
TEL: (0222) 885778
FAX: (0222) 863783

STIGA-BELOS BEST ON SLOPES

MULTI-use tool carriers like the Belos are often blamed for not performing individual operations as well as a dedicated machine. Professional mower users report that the opposite applies on the 4 wheel drive Belos 1500.

Triple cylinder mowing on banks is a case in point. With its fully hydrostatic four wheel drive plus electrically selected limited slip differential, the traction and steering ability on slopes has to be tried to be fully appreciated. And because the Belos 1500 has three double acting hydraulic power circuits in its standard specification, when fitted with the 83" wide Belos front attached triple cylinder, actual cutting performance is equal to the best dedicated out front triple cylinder rider.

Golf courses, country parks, landscaped sites, etc. often have slopes dotted with trees and shrubs which are ideal for the unique maneuvering ability of the centre pivoting, fully articulated Belos. Add the highly sophisticated hydraulic...
CYLINDER MOWERS

Capable of all kinds of work the Ransomes cylinder mower.

4 wheel drive, and you get the unique combination of wheel grip and tight turning without damaging the turf. With differential lock engaged, individual wheels cannot lock and damage the turf. With a hydraulic wheel motor in each hub, oil is diverted to the relevant wheel to give more traction.

The low centre of gravity on the Belos gives extra stability and safety, especially on grass slopes, and also on the subject of safety, a special all-weather safety cab is available as an optional extra.

In Sweden Stiga products are famous for quality, and their long lasting reputation is one WestMac will be wanting to build on, with this unique versatile machine from Sweden.

Model 1302 two wheel drive, centre pivot power unit retails at £10,977.90 and model 1500 four wheel drive, centre pivot power unit retails at £14,371.55 (both prices include VAT).

EDUCATION UPDATE

ELMWOOD AWARD WINNERS COME FROM NEAR AND FAR FOR THE ANNUAL AWARD CEREMONY

WITH over two hundred greenkeepers at Elmwood College it is perhaps not surprising that there should be award winners from such a wide geographical area, studying courses from apprentice to supervisory management level.

Richard Barker from Leicestershire, winner of Elmwood’s distance learning supervisory course is flanked by equal second’s right: Brian Story from Cumbria (who remarkably was also the award winner for the first year greenkeeping course attended by over 55 students) and Bruce Cruickshank from Crail, Fife.

Darren Easingwood from Dunbar Golf Club with the coveted Gleneagles Challenge Trophy awarded for his outstanding project work as part of his SCOTVEC national certificate course.

Paul Seago from the Royal West Norfolk Golf Club, Brancaster, Norfolk, this year’s most “far flung” award winner, with his certificate which recognises him as top student in his SCOTVEC third year course.

No mean achievement considering there were over sixty trainees competing for the award.

The head greenkeeping supervisory management course offered at Elmwood is believed to be unique in the United Kingdom. James McKenzie, head greenkeeper at Renfrew Golf Club, produced written work of an outstandingly high standard to win this year’s award.

JAMES M. LATHAM BIOGRAPHICAL INFORMATION

J M Latham is the Director of the Great Lakes Region of the United States Golf Association Green Section.

He was born in Hillsboro, Texas and attended High School and Junior College there. After a tour of duty in the Marine Corps, he attended Texas A&M University where in 1952, he received a Bachelor of Science degree in Soil Science and in 1954, a Masters Degree in Agronomy (Plant Breeding).

After working as a Turf Specialist on warm-season species at the Coastal Plain Experiment Station in Tifton, Georgia, and additional graduate study at Rutgers University, he served on the USGA Green Section Staff as Northeastern Agronomist in 1956 and Southeastern Agronomist from 1957 until 1960. From that time until 1985, Latham was on the agronomic and Milorganite marketing staff of the Milwaukee Metropolitan Sewerage District.

Mr Latham is a Certified Professional Agronomist and a member of the American Society of Agronomy. He received the Distinguished Service Award from the O.J. Noer Research Foundation following his tenure as Research Director. He is also a member of the Council for Agricultural Science and Technology and holds Honorary Memberships in several Golf Course Superintendents Associations.

The Great Lakes Region is a nine-state area just south of the Canadian border, some 2,000 road miles east-west and 800 miles north-south. During the April-October period, the staff makes 220 half-day Turf Advisory Service visits to 175 subscribing clubs and courses. Until April 1, 1990, the technical staff has been one person.
The Sports Turf Research Institute, for membership is growing longer and
and retirement from work that now
term. The widening of fairways or the in-
gained
expansion by opening up the fairways
achieve a faster throughput of traffic. Un-
commodate a greater year-round flux of
tion of the course in view of its wildlife and
cant loss in course quality.
(a) Increasing Throughput of Golf
b) Existing Flora and Fauna

Innumerable individual courses of today represent ancient habitats. The links and dune systems being probably the more obvious. However, many parkland courses consist of acidic heath or ancient grassland environments. A course at Doncaster, South Yorkshire, the Town Moor course, is a local authority owned course and has been historically documented in terms of its changing botanical character. The coast of the British Isles was a prin-
tarily as a consequence of its un-
past. Many courses are set upon species-rich sites and have the potential to recreate the past habitat.

(c) Existing Flora and Fauna

Many golf courses are an important part of the British golf heritage. To quote H.S. Colt (Book of Links 1912) "The only way to make a

PLANT COMMUNITY FEATURES

The early golf architects used the existing
isLANDSCAPE HISTORY. Many of the courses of to-
its part played in terms of Britain’s land-
its part played in terms of Britain’s land-
be

The roughs representing fairway divides on many parkland courses need not severely affect the throughput of traffic when given correct maintenance. The British

Course quality must also incorporate the natural beauty in terms of the visual quali-

\[ \text{(a) Increasing Throughput of Golf} \]

Many greenkeepers have commented to me that they spend so much time man-aging the semi-rough and rough that the priority areas struggle in the com-

(b) The Fairway

The above are representative of prob-

(c) Existing Flora and Fauna

There are many ways in which course

(i) The rough

The rough areas, when graded, zon-

(ii) Boundary Outcomes, perimeters, of out bounds

Those golf courses perimeters, of out bounds

S.T.R.I.

ON COURSE FOR QUALITY

An Ecological Concern

By R. Taylor

Advisory Agriculturist, Ecologist
The Sports Turf Research Institute, Bingley, West Yorkshire, BD6 1AU

Golf is the fastest growing sport of
today, indeed the demand far ex-
ceeds supply and the waiting list
for membership is growing longer and
longer. It is the urban expansion, the in-
crease in leisure time due to redundan-
cy and retirement from work that now
calls the tune to open up the course, to
destroy the character, the natural and the
national heritage at the expense of the
wildlife and the landscape character.

Many clubs are looking towards course
expansion by opening up the fairways
and manicuring all areas in an effort to
achieve a faster throughput of traffic. Un-
fortunately, what is gained through in-
creased throughput can result in a signifi-
cant loss in course quality.

It must be remembered that the in-
judicious increase of throughput gained
may be counter-productive in the longer
term. The widening of fairways or the in-
creasing competition for maximum attention. The semi-

(a) Increasing Throughput of Golf

(b) Existing Flora and Fauna

(c) Existing Flora and Fauna

(i) The rough

(ii) Boundary Outcomes, perimeters, of out bounds