

grinders for Ransomes back in the 1800s

"Going through old records and working with Ken Boardman, the then MD of Atterton's, I learned a lot about the actual construction of a cylinder and bottom blade," recalled Stephen. "It was fascinating discovering original developments of the mower and how they were designed and built back then, in the early 1800's.

On the strength of that, Bernhard's and Atterton's began developing machines which adopted a whole new approach to sharpening.

"The new grinders were fast and simple to use. Grass areas cut with these sharpened mowers looked greener, healthier and our costs reduced dramatically. We never looked back.

Other European landscapers and maintenance contractors, keen to reduce their own costs, soon started to buy these new sharpening machines from Bernhard's who, in 1972, formed a new sales and marketing company, Bernhard Rugby Export Services.

Jacobsen's Sales and Marketing Director met Stephen at a show in Paris and asked him to meet their service people at their US factory in Racine.

"We already had good links to Ransomes and soon found ourselves working with Toro in Minneapolis too.

While visiting US manufacturers and dealers, it was surprising to discover how sharpening techniques there were so different to those in Europe.

We began selling our machines

which, in those days retailed for about \$12,000 while in the States machines they used were costing as little as \$2,000.

Using these cheaper machines in the USA almost invariably involved operators having to backlap after-wards to make mowers cut. This made it necessary to thin the blades, making them more fragile. (This is the process they call relief grinding). The whole process often took over two hours.

"On the other hand, using Express Dual and Anglemaster grinders, they were able to sharpen greens mowers in only 20 minutes, floor to floor including the cylinder and bottom blade

This huge step forward made these British machines very attractive to the Americans, particularly as they were so much more user friendly and required less skill. The dealers were excited by the prospect of this speed and their increased profits.

Sales took off in the USA and since that breakthrough there are now something in excess of 10,000 in the States and over 14,000 worldwide.

Over the last few years the Express Dual has changed a lot. Now there is no need to remove the bottom blade to grind the cylinder, a big advantage. Sharpening takes under five minutes. Machines are almost fully automatic, electronics are incorporated and the use of hydraulic lifts enables one cally onto the work table.

One aspect which has delighted Stephen and his team is the positive way the company is treated by its customers

"Our users are all like members of a

family. Whenever we exhibit we get top Superintendents coming to our stand to tell their success stories and pass on information to whoever will listen. It's great for our sense of pride," he said.

In July 1997 Bernhard & Co Ltd. was the proud recipient of the

prestigious "Small Business of the Year National Export Award" from the Department of Trade and Industry. This award recognises

significant contributions that companies with fewer than 300

employees, make to the UK's exports. Over 80% of Bernhard's production goes to overseas markets.

BCo has two locations, the central office and marketing base with its team of 20 in Rugby and the factory in Haverhill Suffolk where the machines are produced.

'We continue to trade in England as Atterton and Ellis Ltd," explained Stephen, "as it is the name that started the grinder business in 1856, and we are very proud of our roots.

The company is very progressive. Part of the philosophy is to

encourage all the employees to think of the business as their own. This leads to excellent quality and product reliability. Consequently BCo is able to offer a unique 10 year warranty. It is something which Stephen always makes a point of emphasising when talking with his

team. "We actually exchanged an eight year old machine with a brand new one, free of charge. It was showing signs of metal fatigue

having sharpened 1600 fairway mowers every year," he told me. "With the amalgamation of Bernhard's

and Atterton's, we try to ensure that key employees who make and assemble machines and our Research and Development people, go out and work with machines on site, to learn what it's like to be a mechanic on the shop floor at a golf course.

We need to build machines that are easy and fast to use, simple,

reliable and cost effective. We're not interested in bells and

whistles - they complicate mainteand often counterproductive."

Hands-on quality control is led by BCo's Managing Director.

"I try to spend almost half my time at golf courses, frequently working on our machines. Our users are the people who influence the business most. It's essential to hear what they say and be guided by them," Stephen maintains.

delighted to join BIGGA as a Golden Key Supporter.

"We want to become a really effective partner of BIGGA, contributing to its membership by helping to develop understanding of what goes on when you have a cylinder and bottom blade that sort of try to murder the grass!" Education has been an important part of Bernhard's success around the world.

"Mowing is the last thing done to the grass every day before customers are let loose on the golf course. Our job is to make that mowing job easier, more cost effective and to produce a superb result that pleases players and Greenskeeping staff alike.

Sounds like a life at the sharp end.



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Two years on from his last Greenkeeper International series on computers and computing Ken Richardson catches up on the many developments in a fast moving and exciting industry.

In the two years since my last series of articles on digital computers and their software, computer technology has continued to advance with more and more applications being developed, more hardware being provided for lower prices and operating systems becoming easier to use. Some golf clubs and some greenkeepers still seem to be reluctant to introduce this type of technology but from the feedback that I receive, it is lear that greenkeepers are beginning to see how computers can be used as useful tools in greenkeeping nanagement. In this article, I will ry to update some of the informaion that was written in 1997 and plain how changes in hardware and software have made computers cheaper, more flexible and easier to

Computer Hardware

Computer hardware is all of the hard items that comprise a computer as opposed to Software which comprises the instructions that make the computer work. There are two main types of computer that can be used in the office. These are the PC clones and the Apple Mac. The popularity of the Apple Mac has waxed and waned but many offices, including BIGGA HQ, still use them. However, the lower cost computers are mainly PC clones rad the majority of software, mcluding golf course management software is designed to run on PCs. All digital computers are made from four basic components; input devices, such as keyboards, mouse, microphone and joystick, output devices, such as monitor (screen, VDU), printers and loudspeakers, a central processing unit (CPU) and Memory (Storage).

Let's now look at each of the four components in more detail.

Input devices

A second

Digital computers can use a number of input devices but I will only consider the Keyboard and mouse in this article

Keyboards

There are many types of keyboard, each with slightly different keys. However, all keyboards have keys that are common.

Most keyboard use the QWERTY layout for alphabetical and numeric keys, a series of function keys, cursor and screen control keys and a numeric keypad. There are some other 'special' keys that you may have to use. The use of these and other keys will become clear as you begin to use your computer.

To conform with the Heath and Safety at Work Act, keyboards should be height adjustable and be capable of movement around the desktop to ensure a comfortable working position and to minimise the risk of repetitive strain injury. Mouse

There are several types of mouse that come in different shapes, however they all operate in the same way.

Externally, the mouse consists of

two buttons and a roller ball. Note, to prevent excessive wear and a build up of dirt and or static, it is always advisable to use a mouse mat. The mouse can be used to perform three operations. These are Point, Click and Drag.

Output Devices

Digital computers can use numerous output devices including monitors (screens, VDUs), loudspeakers and printers.

Monitors

Monitors come in different screen sizes, however, the usual office/home computer comes with minimum screen size of 14 inches and 17 inch screens are becoming the norm. Todays technology provides excellent quality with full colour and the option of a flat screen.

Printers

There are many types of printer but the usual types found in homes and offices are dot matrix, bubble (ink) jet and laser printers. Bubble jet printers can be used to print in black and white and colour and can give good quality results at a reasonable price. However, if you are considering printing a large amount of material then the cost of ink cartridges can be quite high. The fastest high quality print comes from laser printers but the cost can be high. Colour laser printers are very expensive for the average office or home.



Central Processing Unit The Central Processing Unit (CPU) is the heart (or brain) of a digital computer. This unit con-tains the processor which is, usually, a Pentium, or equivalent, memory devices, control circuitry and devices to perform calculations and logical functions. Advances in technology mean that processors are much faster and can complete more operation in a given time.

Memory

There are several types of memory or storage devices. These are; random access memory (RAM) which is short term memory, Read only memory (ROM) which allows you only to read information ie take information out, it will not allow you, the user, to write (store, put in) information, compact disk ROM which is also preprogrammed by the manufacturer and can hold large amounts of data on interchangeable disks, floppy disks, used to "back up" work, and hard disks which are similar to floppy disks but hold much larger amounts of data.

Once the various components of a computer system are connected together and the power is switched on software is needed to make the computer perform its various tasks.

Software

Software is the name for the instructions that make a computer do what the operator wants. The two main types of software are Systems and Operating Applications.

Operating Systems

Operating systems tell the computer what to do and when to do it. A built in operating system (BIOS) starts to operate when power is applied and 'boots up' the computincluding launching the Operating System. The usual operating system for small offices and home use is Windows 98, although older computers may still run under Windows 3.1, Windows 3.11 or, even under DOS. Windows 98 supplied with most PC type computers and is an upgrade to Windows 95. Windows 95 simplified the method of operation and used an icon (picture) based system. This allows the operator to point the mouse pointer at a picture, click the mouse button and access a selection of "menus". Windows 98 has added several extra features. These are:

a. Faster performance and load times, improved plug and play

hardware detection and improved power management.

b. Configuration improvements such as display settings and Accessibility Wizard.

c. An improved Help system.

d. New Utilities such as the Maintenance Wizard and improvements to existing utilities.

e. New multimedia features.

f. New Internet and communication tools.

You can learn to handle Windows 98 by:

a. Trial and error, using Windows help.

b. By using an appropriate text book eg "Teach Yourself Windows 98" or the Idiots Guide to Windows 98" both available from the BIGGA Library. c. Attending a BIGGA training

course.

d. Attending a college computer course.

Applications software

There is a long list of applications software from games to education courses and office tools to software development tools. However, there are several software packages that are very useful office suites and other packages that can help in the management of the golf course. These include:

Microsoft Works

This is a simple package that contains word processing , spreadsheet and database software. Ideal for beginners, it lacks the sophistication and flexibility of other packages.

Microsoft Office

This package also contains word processing, spreadsheet and data base software but also includes Powerpoint, a presentation package and can link to the Internet. Office is a very flexible package that includes a wide range of useful features and is becoming a standard package in many offices.

Claris Works

This package is similar to Microsoft Works but also includes a draw package and a paintbox package.

Lotus Smartsuite

This package is similar to Microsoft Office

TRIMS

TRIMS is a software package designed to help with the management of golf courses. It comprises an interactive set of functions which cover machinery, staff records, budgets, fertiliser and pesticide records, weather, irrigation, spares etc. Produced in the USA, TRIMS has been available for approximately ten years and is available, through BIGGA.

Qquest

A similar package to TRIMS with slightly fewer facilities but at a lower price. Quest is available from Wessex Software Systems telephone 01798 831020, fax 01798 831381.

Turf Way

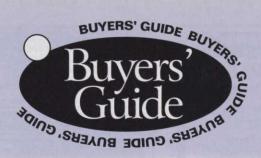
A very simple, but cheap option is produced in Canada and costs \$350 ie approximately £210. Full details on the software can be Internet tound on the Internet www.edm.shaw.ca/~pds and you on the can order a demo disk from Franz Hasenhundl at fhasenhu@trm. intrawest.com. Alternatively, you can obtain a demo disk and further details by faxing Precision Data Services on 001 403 4637176.

On Course

Produced in Sweden by Epani systems, this package sold well in Sweden, Holland and Germany. Epani are, currently considering a British version of their software and BIGGA are involved in this development.

I have tried to give an idea of how computer technology has advanced in the past two years. Rereading this article and those produced in 1997 show that progress has been rapid in terms of hardware and software and that prices have tumbled. However, computers are not easy to handle, they need you to understand a special language and to have an ability to type. Voice recognition is, already available on some systems and is being introduced into quality cars and aircraft. What the next two years brings is anybody's guess. If you know what the future holds then please let me know and we can both make our fortunes. For further advice on hardware, software and training please contact me at BIGGA HQ.

Next month Ken will advise on what to buy and where to buy it.



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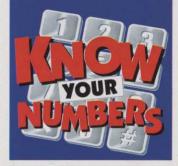
Know Your Numbers, Greenkeeper International, BIGGA HOUSE, Aldwark, Alne, York YO61 1UF

Entries to reach us no later than Wednesday, February 17, 1999. The first correct entry drawn will receive a cheque for £50!

The judges decision is final. No correspondence will be entered into. This competition is not open to BIGGA staff or non-members.

Last month, Jeremy Eastwood of Woodsome Hall GC, certainly knew his numbers when he correctly identified all three telephone numbers.

Our congratulations and a cheque for £50 are on their way to you!





⁵⁶ Greenkeeper International February 1999







Recruitment



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Stockport, a private members club established in 1908, is an 18 hole parkland course, which will host the regional qualifying competition for the Open Championship for the years 1999 - 2003.

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Salary is in accordance with Standing Committee rates. No accommodation is available.

Closing date 26 February, 1999

Applications to; J E Flanagan, Secretary, Stockport Golf Club Limited, Offerton Road, Offerton, Stockport, Cheshire SK2 5HL. Tel: 0161 427 8369

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The Centre Manager, Hoebridge Golf Centre, Old Woking Road, Old Woking, Surrey, GU22 8JH

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Salary negotiable

Accommodation not available

Apply in writing with full C.V. to

Secretary/Manager, Scraptoft Golf Club, Beeby Road, Scraptoft, Leicestershire, LE7 9SJ

Telephone: 0116 2418863

Closing date: 5th March 1999

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We also seek to appoint an Assistant Greenkeeper.

Please apply in writing with CV to: Jeff Robinson, Course Manager, Ilford Golf Club, 291 Wanstead Park Road, Ilford, Essex IG1 3TR

New Zealand Golf Club

Requires

Qualified Greenkeeper

Applicants must be qualified to NVQ Level 2. Salary and conditions are negotiable but no accommodation.

Please apply in writing, enclosing a full CV to:

The Secretary, New Zealand Golf Club, Woodham Lane, Addlestone, Surrey KT15 3QD