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Team Championship



BROKENHURST MANOR HEADS TO ARIZONA

The first UK qualifier for the John Deere Team Championship was won by Brokenhurst Manor and the New Forest Club will now represent the UK at the world final in Scottsdale, Arizona.

Four members of Brokenhurst Manor Golf Club in the New Forest are flying off to America after winning the Great Britain national final of the inaugural 2002 John Deere Team Championship golf tournament, held in August over the Brabazon course at The De Vere Belfry.

The team, joined by a fifth player from their local John Deere dealership, beat off stiff competition from clubs across Great Britain to take home the trophy, and the chance to travel to Scottsdale, Arizona, to play in the world final at Grayhawk Golf Club, in November, against teams from North America, Canada, Australia, Germany and Ireland.

The team, represented by Charles Letchworth, Club Captain; Paul Clifford, Secretary/Manager; Ed McCabe, Course Manager; Bruce Parker, Club Professional, and David Harrison, New Forest Farm Machinery, finished three shots clear of the field with a remarkable nett team score of 55.

In order to qualify for the national final, Brokenhurst Manor beat 16 other teams in their regional qualifier, organised by Nick Clarke, of New Forest Farm Machinery, and held at Moors Valley Golf Club last July.

A total of 27 dealerships took part in this year's tournament with a total of 450 clubs competing, meaning that 1800 players competed in the first John Deere Team Championship event.

The qualifying tournaments ran from April to July at host golf clubs throughout Great Britain and Ireland, with each winning team going through to play at The Belfry.

Now in its 16th year, the John Deere Team Championship has traditionally been open only to teams from the USA and Canada. Last

year invitations were extended to Germany and Australia. This year teams from Great Britain and Ireland were also included.

At the presentation dinner John Deere Limited also made donations, based on the number of participating teams, to BIGGA and the GCSAI to support the educational activities of the two Associations. A cheque for £9,300 was presented by John Deere Managing Director, Clay Sherrill, to BIGGA National Chairman Richard Barker.

It was subsequently agreed that the donation to BIGGA would be used to support the educational programme at Harrogate next year.

"We are absolutely delighted to receive such a generous cheque from John Deere and the funding will support the National Education Conference and workshops in January," said Neil Thomas, Executive Director of BIGGA.

The 27 teams who played at The Belfry were joined by two additional teams comprising members of BIGGA and the GCSAI, who had their own private battle which was eventually won, by a single shot, by the Irish.

Ed McCabe, was not surprised that the team did well when they got to The Belfry.

"We were 18 under par in winning the qualifier and combined very well as a team. We repeated that form in the final and finished 17 under par," explained Ed, who plays off 5.

The team's secret was to use up all the allocated drives - two per player - in the first 12 holes and give themselves a free run over the closing holes, and the tactic worked a treat.

"We were seven under par for the final seven holes with two eagles





and three birdies. It was great and everyone contributed to the win," said Ed, adding that in the 36 holes the team had yet to pick up a bogey.

With the final looming Ed is looking forward to the trip to the desert and he will certainly not be under prepared.

"We're not going out there to make up the numbers. I've practised more in the last three months than I have in the last three years. My wife thinks I've gone mad. I'll be particularly interested to see how the ball flies in the desert and how we cope in the heat."



He is particularly pleased that the success has come with a team comprising the Club Secretary and the Captain.

"The Captain is a great guy and he has had a super year as Captain. Hopefully this will be another highlight."

Although a long way from home, Brokenhurst will not lack for support in Arizona as some members will be making the trip to watch. Several other Brokenhurst members who live in the States will also be making the shorter journey to swell the galleries.



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Bringing quality to play



BIGGA GOLDEN KEY and SILVER KEY MEMBERSHIP



JOHN DEERE



MASSEY FERGUSON



'Strengthening the Partnership' - Neil Thomas reflects on the invaluable contributions of Golden and Silver Key supporters since 1992...

One of the cornerstones of BIGGA's Education and Training programmes is the Education and Development Fund. It is the Fund which provides the means to produce Field Guides, Books, Posters, Videos, Careers Advice Packages, assist with Region and Section Conferences, Seminars and Courses and enable the purchase of Training Aids e.g. computers, video cameras, digital camera, OHP, LCD Projector, 34mm Slide Library and Lending Library. For BIGGA's members it is therefore vital in their education and training advancement. Yet how much is known about the Fund, its origins and those who contribute to it? Time to dig a little deeper.

First, and perhaps a surprise to some, it is a long standing Fund. It was established in January 1992 and has certainly stood the test of time. Traditionally greenkeepers had always enjoyed the support of companies within the industry and for many years this was at a local level and was reflected particularly in backing for Section seminar programmes and prizes for golf tournaments. With the advent of BIGGA, it was inevitable that the nature of this support would change. In just a few years, companies found that they were now working with a large, professionally run Association which operated nationally and regionally as well as on a Section basis. Companies continued to wish to support greenkeepers and the development of their profession but found there were now conflicting pressures at the respective levels of BIGGA. The Association for its part had no wish to see companies pressurised in this way and saw a need for consistency and fairness in relations with companies working in the industry. To meet this need, the Education and Development Fund was established.



The Fund enables those companies so wishing to join as either Golden or Silver Key members, thereby enabling the development of BIGGA's education and training programmes at a national level as indicated earlier in this article. While 17 companies are currently taking this route, the Association is mindful of those companies who wish to continue many years of support at regional and section level. This support continues to be much valued. The benefit of the Fund to companies is that it provides equal recognition to all and they can clearly identify the projects on which their contributions are being spent.

Meetings are held with the Golden and Silver Key company supporters in the spring and autumn each year. Recommendations for spending priorities from the Education Sub-Committee are considered at these meetings and company representatives can themselves put forward projects for consideration. Companies are acknowledged for each and every spending programme. While wishing their contributions to be acknowledged and their companies profiled, those attending the meetings are anxious to avoid overt commercialism. The participating companies also enjoy a number of practical benefits related to BIGGA membership and formal recognition each year at the BTME.

The Fund has achieved much over the years. As far back as 1993 'Setting the Standard - In Spray Application' established a trend for first class videos which continued through to 2001 with the excellent 'Irrigation' video. Field Guides, starting with 'Weeds, Pests and Diseases' and through to 'Grasses in the Rough', have proved of great benefit to greenkeepers. Particularly high profile was the 'Wildside of Golf' booklet last year which has been excellently received both within the game of golf and wider afield. This year the Fund will be continuing with the Training Voucher Scheme which enables companies to provide BIGGA members with vouchers to be used to offset the costs of BIGGA training programmes.

A highlight for 2002 has been the decision to bring careers advice for greenkeepers up to date in a jointly funded project with the GTC as the 1994 video 'Keeper of the Green - A Career in Golf Course Management' had become dated. The package will be available on DVD and CD with the voice over once again being provided by Peter Alliss. It will be available very shortly and will be sent to careers offices, schools and colleges as well as being available to golf clubs and greenkeepers upon request.

It would be remiss of me not to mention the individual Golden and Silver Key BIGGA members who support the Fund as part of their annual membership subscriptions. They are acknowledged each month within 'Greenkeeper International' and their contributions are greatly appreciated. It is important to note, therefore, that the Fund is not purely for companies. Individuals who wish to support greenkeeper education and training have a means to do so through the Fund and many have contributed over a considerable period.

Finally, in acknowledging the first class support that the Fund has received from companies over the years, there remains a need for greater recognition of these companies by greenkeepers in general. Considerable numbers of them have received substantial enhancement of their education and training programmes through the resources of the Fund. Indeed a number of companies have now supported the Fund for eleven successive years. It does not take much for a 'thank you' now and again or perhaps an invitation to a Region or Section event where the support can be acknowledged. Partnerships with companies in the industry have always been important. I am sure that they will remain so and BIGGA members can do much to strengthen existing partnerships and forge new ones for mutual benefit in the years ahead.



Heath Lambert Group



MACHINERY Maintenance

MAKING AN OLD DOG, MAN'S BEST FRIEND

Scott Nisbet looks at your old faithful friend the two stroke engine.

The two-cycle (two-stroke) engine is like an old dog. It's been around for 100 years. It can stink. It will snarl and snap. It can be an ill-tempered beast that won't obey your desires. Or, like a good hound, it can be a trusty companion and helper as you roam the golf course taking care of chores. Its behaviour depends on whether you feed it well, keep it clean and give it a good home.

Two-cycle engines are found on hand-held equipment – string trimmers, power blowers and chain saws. Occasionally you'll find a two-cycle walk-behind lawn mower or on a specialised piece of equipment like a post-hole auger. Your golf course may have two-cycle engines in golf carts. If you like to have vehicular fun off the golf course, you'll find two-cycles powering snowmobiles, smaller boats and "personal watercraft" such as jet skis, some motorcycles and even aircraft – ranging from radio-controlled model planes to ultra-lights.

Many landscape professionals assume two-cycles are dodgy things that can't be trusted to start easily, idle smoothly, or keep running. But the fact that people trust their lives to a two-cycle engine when they take off in an ultra-light demonstrates that these quirky little engines can be tamed and trusted.

There are no special secrets to handling two-cycle, but there are a few common practices that are worth adopting as habits of operation and maintenance. These good practices will become more important in the years ahead, because two-cycle design changes being forced by pollution-control laws are likely to further emphasize them. The little engines are changing in ways that will make care and feeding even more critical to their value as helpers on the course.

UPS AND DOWNS

The two-cycle is called that because to produce power, the piston needs only two journeys through the cylinder bore – one up, one down. The engines used in cars and trucks need twice as many trips to produce one power stroke, and is called a four-cycle. Despite making twice as many power strokes at a given rotating

speed, the two-cycle doesn't produce twice the power of a four-cycle. But, it does produce twice as many exhaust pulses, so it sounds as if it is running twice as fast.

The two-cycle is suited for high-speed operation because it needs only 3 major moving parts – the piston, connecting rod and crankshaft. The piston, as it moves up and down, serves to control the flow of air-fuel mix into the cylinder and the release of exhaust. A tiny bit of oil is mixed into the fuel, so all the internal pieces are bathed in a lubricating mist. The oil is burned along with the fuel and helps produce the characteristic gray exhaust plume that marks a two-cycle. By contrast, a four-cycle needs a bewildering array of valves, levers, camshafts and more to control intake and exhaust, and a complex pumping and plumbing system for lubrication.

Design simplicity and high operating speed give small air-cooled two-cycle engines a superb power-to-weight ratio that suits them well for hand-carried tools and light vehicles.

However, simplicity has a dark side – pollution – that threatens the two-cycle's future. The problem lies in the fact that during the piston down-stroke, two incompatible things happen in the cylinder: The hot exhaust gas is moved out at the same time a cool supply of fresh air moves in. These two incompatible 'blobs' of gas can't be separated by a solid wall. Some exhaust gas remains behind to weaken the potential power from the fresh fuel charge. Worse, some unburned fuel and oil leaves with the exhaust. This discharge of raw hydrocarbon vapour and particles is amongst the most reviled mobile-source air pollutants on the planet.

A United States Environmental Protection Agency action in October 2001 set up new standards that raise the emissions bar extremely high. Major technical changes will be needed to permit

continued US use of two-cycle motorcycles, all-terrain vehicles and snowmobiles. Comparable rules are popping up all over the developed world. A World Bank report in July 2001 said a leading cause of premature deaths in South Asian cities is the air pollution from the inexpensive two-stroke motor vehicles that are commonly used in developing countries. Legislation to follow? The annoying exhaust bark and intake growl of two-cycles has also spawned laws in various US cities, based on noise pollution.

The hand-held equipment currently sold incorporates technical changes adopted to meet the regulations and more changes are in the pipeline. While some manufacturers, notably Honda and Ryobi, have developed four-cycle engines for string trimmers and power blowers, the bulk of manufacturers are building modified two-cycles that meet current regulations. In development are many different designs aimed at meeting future standards. It is likely that these future products will need special care and feeding. It's worthwhile to start adopting today the operating and maintenance habits they will call for.

CARE AND FEEDING

"Barking" and "growling" were traditionally ignored in two-cycle design. Minimalist mufflers and air intakes noise control saved a lot of weight. New designs increase the size and weight of these external parts. To keep total engine weight about the same, designers have reduced the weight of core components like cylinders, crankshafts, starters, etc. This shift has serious impacts on operation and maintenance.

Newer engine designs typically squeeze more power from each cubic centimeter. This is done with a leaner fuel mixture and higher engine speed; both result in higher engine heat loads. This means some new practices for operators and technicians. Carburetor



passages are physically smaller, with higher precision needles. They are less tolerant of particles coming in with the fuel, so the filters are much better. Partial blockage of a fuel passage can 'over-lean' an already lean-burning engine, causing destruction through under-lubrication and excess heat. Change the fuel filter often. Fuel can't be allowed to linger for months in the tank and evaporate into solids that will load up the filters. Get in the habit of emptying two-cycle hand-held fuel tanks when a unit will be in storage more than a week.

The cooling system has a higher load. So attention must be paid to keeping air intake screens free of debris. Cooling fins, on both the fan and cylinder, should be cleaned more often.

MACHINERY Maintenance



That means opening up the shrouds more often to blow away chaff. The higher heat and speed demand better spark plugs. The electrodes are more likely to burn away, opening up the spark gap. This can lead to harder starting. It can also alter the ignition timing because it may take longer for an electron charge to build enough to jump a larger gap. Altered timing can change power output and increase engine heat production. So check, re-gap and replace spark plugs frequently. On daily-use machines, this may mean monthly plug checks. When you do this, make sure the engine is cool to avoid stripping out the plug threads in the cylinder head.

It may be worth considering switching to synthetic lubricants for two-cycle engines? Many users have experienced extended engine life with these products. A significant advantage is that a single batch of synthetic fuel-oil blend can serve a wide range of different two cycle engines which may call for fuel-oil blends ranging from 16:1 up to 100:1.

Beside simplifying inventory, the synthetics seem to leave fewer deposits in the critical piston ring area. A seized piston ring is often fatal to a two-cycle engine, so preventing that is usually worth the higher price of the synthetic lube.

KEEP IT FAST

Newer engines get more power per cubic centimeter, but they often have less "flywheel effect" than old designs. Equipment operators need to learn to keep engine speed up. When using a brush blade, for example, it's best to take many small high-speed bites rather than trying to "lug through" with a steady cut. It's imperative to frequently sharpen chain saw chains and brush blades, to reduce the engine load and allow higher operating speeds.

The mechanisms downstream from the engine, items like the gear heads in string trimmers and clutches on chain saws, should be checked for proper operation. Any binding or maladjustment should be cured in the interest of safety, reducing engine load and permitting full-speed operation.

Throttle cables and linkages should be checked frequently to verify that they are pulling the carburetor fully open. Air filter elements should be checked and changed more often to allow the free flow of air into the engine. And the muffler system should be frequently checked for blockage.

Carburetor fuel-mixture adjustment is one of the more critical elements to two-cycle operation, since it controls both the leanness of fuel and the quantity of lubricant. Each machine will have a specific system for adjustment. Some will permit no adjustment, while others will. Read the operating manual and follow it strictly.

STORE IT RIGHT

Storage is an important issue for two-cycles. Some are showing up with catalytic converters. These platinum-bearing, ceramic honeycomb exhaust filters have been used on cars for decades. They make unburned fuel molecules combine with oxygen, to eliminate troublesome emissions. But the converter, which looks like a regular muffler, is more fragile because of the internal ceramic honeycomb. It retains its heat longer after the engine is shut down. The extra heat may be enough to start a fire by inadvertently storing a hand-held power tool in a position where the converter contacts flammable materials.

Assess the storage setting for your two-cycle equipment to eliminate wood, grass clippings or any other potentially flammable materials. Train operators to store the equipment so fuel left in the tank can't inadvertently dribble onto the muffler or converter. Also, be careful of wildlife, particularly insects. For some reason, spiders seem to take a special liking to two-cycle engines. Some species like to build nests in the exhaust outlets, causing a clog. Operators have received painful stings. Whatever the reason, take some extra time to verify there's no fauna cluttering up the storage area.

Goodness knows the little pups with two-cycle engines are enough responsibility for anyone.

This article first appearing in the Australian Turfgrass Management magazine.

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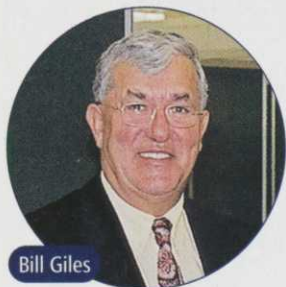
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Scotts

Weather



Bill Giles

WEIRD OR WHAT?

Bill Giles reviews the weather experienced over Britain's latest version of summer and predicts that we may not have seen the last of it.

It has been a rather disappointing summer as far as golf is concerned, and it was certainly one in which the weather forecast played a very important part.

The forecasts for the summer months of June, July and August, which I issued in early May, went for a summer which would be remembered for the bad parts rather than the prolonged warm sunshine.

Ideal weather for sports is very similar to ideal farming weather in that everyone wants something different depending on what activity they are taking part in. The golfer, obviously, wants fine, if not sunny weather, though obviously not too hot, to play in. There should be a cooling breeze, but not too strong, unless you happen to play links golf in which case you are probably used to the conditions and have a distinct advantage over those who don't.

On the other hand, those administering the game, and especially those greenkeepers who make the game possible, want something different. In prolonged drought you can always irrigate, but it is so much better if nature does it for you - especially at night so as not to interfere with playing the game during the day. But if the rain comes down in short very heavy bursts, as it did this year, then all you end up with is run-off and flooding which can force the course to be closed with the consequent loss in player enjoyment and revenue.

So what about this summer for the United Kingdom? Well, as I have already said, very much a mixed bag. In many respects Scotland fared worst with some very heavy and damaging downpours, which played havoc, shutting some courses for days on end.

June in Scotland brought a lot of southwesterly winds in from the Atlantic, which gave copious amounts of rain in the south where many places had up to twice the normal June rainfall. At Eskdalemuir, in the central lowlands, the wet May was followed by a wet June making it the wettest May/June for 64 years since 1938.

During the month the southwesterly winds predominated, giving a lot of heavy showers to the south and west of Scotland. In fact, parts of southwest Scotland, including Glasgow, only had four days in June when it didn't rain. The north and East of Scotland were much better off and, in the shelter of the Highlands, only had the normal amount of rainfall for June. Because of the cloud and rain, June was a very dull month in the south, in

fact the dullest since 1966. In contrast, Lerwick in Shetland, was drier than normal with 130% of the monthly sunshine average.

July continued in the same vein, with the showery weather lasting into the middle of the month, but then drier and more settled weather spread across the west and south of Scotland, although there was still a lot of cloud. The last week of July saw a battle between the hot, humid weather over England and the cooler regime in Scotland. This produced some torrential rain over northeast Scotland with the Moray Firth having their wettest July day on record on the 30th, giving widespread flooding. Fife Ness reported nearly two and a half inches of rain (60 millimetres).

August was a better month across Scotland but there was a legacy of dull wet weather at the beginning, which caused great concern to many clubs.

For England and Wales, June was really nothing out of the ordinary. There was a good deal of dry weather and with the average of 57 millimetres, just over two inches, the month was, if anything, drier than average. But there were some exceptions. These came in the form of thunderstorms, which to the golfer are no use whatsoever, and to the greenkeeper a frustrating waste of water.

On the 4th and 5th of June, heavy thunderstorms brought nearly two inches of rain to parts of southeast England and East Anglia, and these heavy showers lasted through to the 11th. In the storms it was very windy with a gust of wind of over 60 miles per hour reported near Swansea on the 10 June.

The third week of June saw further thundery rain, this time starting in the north of England, but which also broke out in the southeast too, as temperatures soared to 29 degrees Celsius or 84 Fahrenheit. The fourth week of the month wasn't too bad from the rainfall point of view, though there were some heavy downpours over Snowdonia and the Lake District.

It was the month of July that caused chaos on some courses with the

