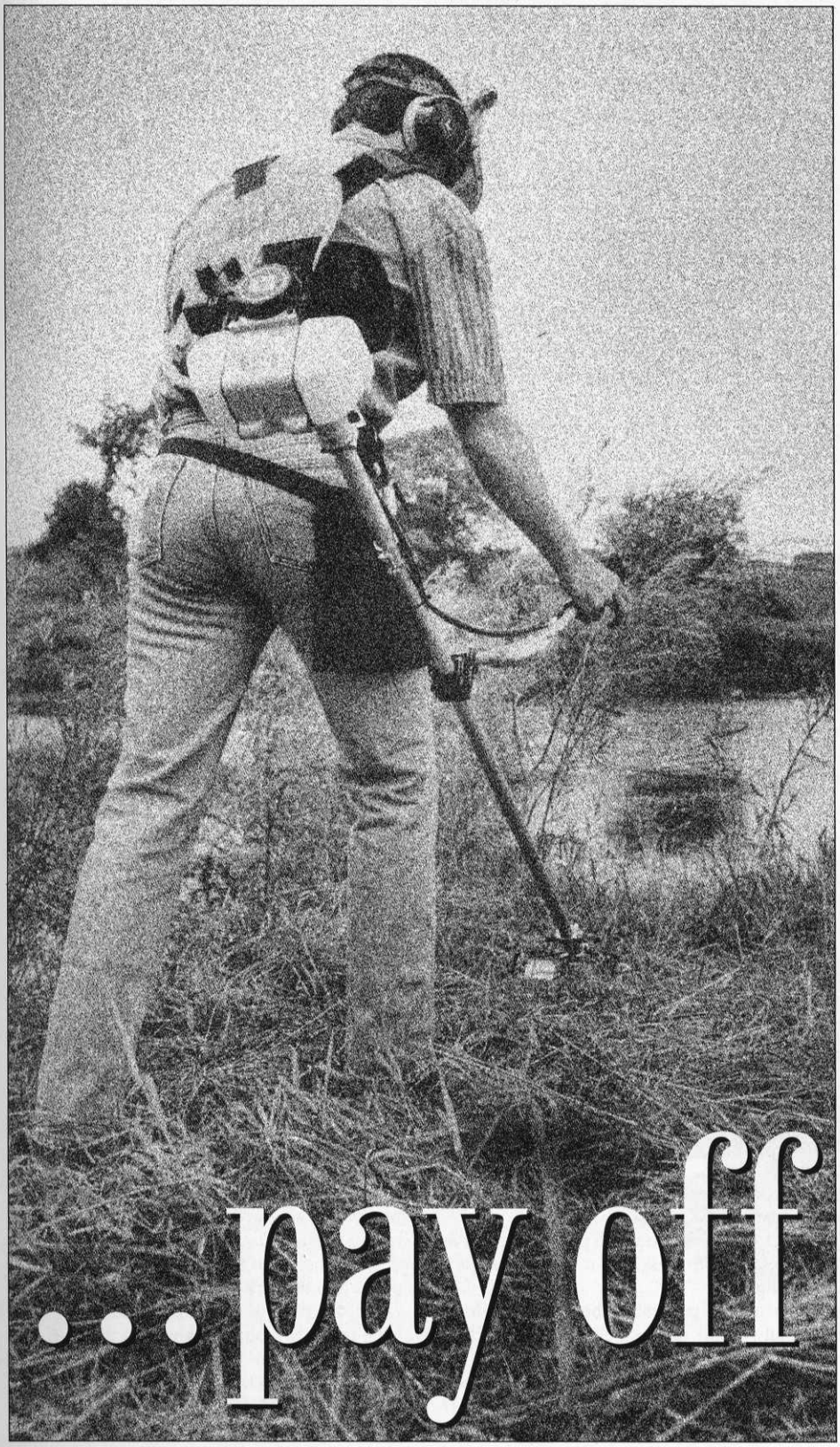
Preparation and detective work...



...pay off

Roland Taylor gives some advice on what to look out for in outdoor power equipment before committing pen to cheque book.

With a "force six" howling round the machinery sheds and snow piling up on the fairways, now is an ideal time to do preparation and research into the equipment you are intending to buy come the spring sunshine.

A visit to BTME at Harrogate presents an ideal opportunity to investigate what exactly is available. The basic components of equipment are often very similar – same engine and drive systems. However, there can be many subtle differences. These are often hidden from view and make a machine ahead of its competition. A good sales person, or enlightening leaflets, should promote these strongly. Where this is not the case, a little detective work can come up with some interesting, beneficial features and advantages.

Let's take a look at outdoor power equipment. Most of this type of machinery is hand-held and often used for long periods of time. In the case of pumps these may have to be transported to sites. One common denominator in all this equipment is the power-to-weight ratio. In recent years there have been considerable advances made in this area. New materials and engine configurations have resulted in increased power and performance, without the accompanying weight.

Engine vibration is also critical. Modern machines will have built-in anti-vibration systems, but in order to keep levels to a minimum, it is also necessary to regularly service all machinery and ensure blade systems are sharp and correctly balanced. Low noise levels are important. There are personal precautions to take including wearing ear protectors, but also remember that noisy equipment can pollute the environment in which it is being operated.

To sum up, what you need to be looking out for is high power output, low weight with minimal vibration and noise levels, plus a well-balanced unit.

Trimmers, brushcutters and clearing saws

We need to identify the difference between these three machines.

The first trimmer was built in a garage in Houston, Texas, belonging to George Ballas. His invention consisted of an electric lawn edger driving a tin can to which was fastened nylon fishing line. He called it "Weed Eater" and went on to sell millions throughout the world. There were soon plenty of competitive brands on the market. This type of machine is used mainly for cutting grass and is sold pre- ➡

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dominantly in the domestic sector. The brushcutter and clearing saw evolved from forestry applications where they were used for cutting brush and later thinning and harvesting small trees. The major advantage of these units is the range of cutting heads that can be fitted, thus enabling them to be used on grass and scrub. From this, it can be seen that a brushcutter is the answer for a majority of readers. Stand a range of different branded brushcutters in a line and you could be forgiven for thinking they had all been cloned. Don't be fooled, underneath those covers there could be a world of difference. This is what you want to find out before deciding which model has the qualities you require.

To begin with, it is important to decide exactly what you are wanting to cut, as this will have a bearing on the size of engine. These start at around 25cc and go up to 100cc. Unless you have a large amount of heavy work a 35cc engine is a good starting point. The drive shaft is subjected to high torsion loads – ones manufactured from a solid, single piece of high-carbon steel are the best. The shaft is mounted in oillite rubber bushes that provide stabilising support and reduce the vibration. When it comes to a choice of handles, the cow-horn style gives better control of the machine. They make it easier to operate and are a "must' when using steel blades.

As far as the cutting head is concerned, this will depend on the type of work to be carried out. Generally, around the course, a nylon line head is suitable for most grass applications. Using the correct thickness of nylon is important as the wrong diameter will slow down the rotational speed.

This reduces the cutting efficiency, increases the chances of growth becoming tangled round the head and places greater strain on the clutch and engine. There may be odd occasions when overgrown areas such as brambles, saplings and light brushwood need to be tackled. For this type of work, a brushcutter blade is needed. These resemble a circular saw and there is a choice of either 30, 80 or 120 teeth – the more teeth the smoother the cut. All the cutting heads are interchangeable.

Chainsaws

This is a piece of outdoor-power-equipment that many courses will not require. For anyone contemplating buying one, there are a number of features that need to be taken into consideration. These are:

- A combination of light weight and engine power.
- It needs to be well-balanced to handle.
- Is it easy to use with a fully built-in anti-vibration system?
- Does the exhaust direct heat, noise and fumes away from the operator when the saw is used at most working angles?

- Can it be started easily and smoothly without "snatch"?
- How many rings does the piston have? Two give better compression, more power and longer life.
- What type of crankshaft bearings are fitted, especially on the drive side?
- Are they heavy-duty and oversized?
- Does it have an automatic piston-driven chain oiler?
- The length of guide bar and type of chain need to be matched to the average diameter of timber likely to be sawn.

This will also determine the size of the power unit. There is no point in having a large powerful saw when for the majority of the time it is only being used for taking off branches. On the other hand, a small saw will not cut efficiently and excessive strain is placed on the power unit.

Hedgecutters

Again, they are not going to be required by every course. Most of the features that one should be looking for in a petrol driven hedgecutter are the same as those for a chainsaw power unit.

As far as blades are concerned, the type, length and height of the hedges are a good guide to which one to choose.

Pumps

When it comes to buying or hiring a pump, time can be saved and possible frustration later by preparing beforehand.

If you have a particular application then the following information will be needed to match it to a suitable pump:

What flow rate is needed? There may be times when you want to move water fast or at least keep ahead of any inflow. This is especially important when dealing with flooding. Is the suction going to be vertical and at what height will it be discharged? The length of pipe run will also be required. Pumps do not generate the same head and this has a considerable effect on the flow. You may wish to transport the pump. If so, it will need a trolley or lifting frame to make this easier. Is it going to be handled by one person? In this case the overall weight will be important. Which is the most suitable power source for your particular requirements? The siting of a pump should be as close as possible to the source of water. Then it can be determined what lengths of hose and filters are going to be required. With all the above pieces of outdoor power equipment there are some other general factors to be taken into account before deciding which one to buy.

How long is the warranty when used professionally? Often this is a different period to when the machine is used domestically. Check the availability of after-sales service, especially replacement parts. An exhibition like BTME presents an ideal opportunity to ask those pertinent questions and find out what really is beneath those covers. You can then match these to your specific requirements and decide whether it is worth seeing the machine perform on your site. The result of this type of exercise will considerably reduce the risk, long term, of ending up with a piece of outdoor equipment that fails to produce the results you expect.

A little homework now can save a lot of frustration later.