ATV GROUP TEST

Quad bikes

# QUADROPHENIA

Who's who in the world of ATVs? We take a detailed look at the market for quad bikes, putting them through their paces on a full working farm. Highly entertaining, they would make fantastic leisure 4x4s, but can they work for a living? And just how good is this new electric model?

Words: Howard Sherren Photography and test riding: Wayne Mitchelson

or many, these are the ideal 4x4. Small, nimble, great fun to drive and highly capable of doing serious work when needed. But how do you choose the quad for you? We took six quads to a 250-acre livestock farm in Cheshire to see how they handled on a number of operations. Models came from the five key players in the market, with the exception of Yamaha, unable to supply us a machine at this time. More significant, perhaps, is the fact that we were able to try the latest electric ATV, the Eco Charger, which gave us a chance to see how a small manufacturing firm could compete with the existing leaders.

The test team included myself, 4x4 driving instructor and photographer

Wayne Mitchelson, with engineer and local farmer George Hitchen. We put the guads to test around the challenging landscape, assessing the stability and traction on some tough and very steep banks, hooking them to a heavily loaded ATV trailer and investigating traction and transmission efficiency up and down the terrain. This was in addition to throwing them into some deep, muddy water to confirm their true off-road capabilities. We also hooked them to some of the latest products from Broadwood International, which included a farmer's favourite flail topper and sheep-feeding trailer to get a feel of day-to-day use. The Wessex AF Series flail mowers come in two sizes, 1.2m or 1.6m and are supplied

with either a side-mounted Briggs and Stratton 18hp engine (AF) or a centrally mounted engine (AFC). There is a handle at the rear to adjust the height and with the engine started a simple hand clutch will engage the drive smoothly and the engine purrs along nicely. For added safety there is a kill switch that can be mounted on the back of the ATV. The AF-120 we tested comes in at £4200 + VAT, with the wider version slightly more at £4750. For pulling capabilities we also loaded the Wessex SF350 stock trailer, which can hold up to 350kg of feed. At £1340 + VAT it makes feeding stock far easier and safer. But at the end of the day, it's the individual performances of these small 4x4s that really matters...





# HEAVYWEIGHT OPTION

#### **CAN-AM OUTLANDER**

Undoubtedly the biggest bike on the test, this Canadian heavyweight is packed full of technology. As soon as you take a look at this machine it is clear it is the most modern and sleek-looking machine in the group. With alloy wheels and built-in lighting kit, it looks, and is, fully-functional. The Outlander is one of the largest on the test with 46hp from a Rotax engine, although the Kawasaki offered slightly more at a claimed 47hp. The acceleration and power of the Outlander is immense but it isn't a noisy bike. When it came to towing it would go anywhere in low range, but the high box was too high-geared and could not tackle banks with a load. The suspension felt noticeably stable, considering the 324kg weight and generous dimensions, with limited body-roll through bends.

The most advanced feature of the bike is the power steering. Not only did it work extremely well but you could also

Engine

Power

Torque

Displacement

Transmission

Suspension

**Fuel tank** 

Weight

Bore x Stroke (mm)

4WD Selection / Diff-lock

Payload / Towing capacity

Ground clearance (mm)

Dimensions LxWxH (mm)

Price (inc VAT)

**Can-Am Outlander DPS 500** 

46bhp

499.6cc

20.5-litre

135/590kg

324kg

279

£9199

82.0 x 47.00

42Nm@6000rpm

Rotax V-Twin, liquid-cooled SOHC

Automatic CVT H/L/N/R and Park

Electronic / Front Diff-lock

2184 x 1168 x 1118

Double A-Arm / Independent Torsional Trailing Arm

adjust it to suit your operation or driving preference with a push button on the handlebars. Possibly a bit overcomplicated for a farm bike but it was very effective. We also liked the reversing light, the lockable fuel tank and lockable gear lever in 'park' for extra security. The racks front and back are wide and very sturdy, although there is only a slight lip at the rear to stop objects from sliding off. There is a massive storage box at the rear, which would be extremely handy for keeping vital tools with the machine in addition to keeping them safe and dry. The price for the tested bike is £7,665.83 + VAT, not quite the dearest machine in the comparison, but you did get the most advanced steering system and some incredible looks. If a road lighting kit isn't required, BRP can supply a non-EC homologated version of the DPS 500 at £900 less, making it far more competitive at £6,915.83. Although we found it a big machine to operate on the yard, with plenty of grunt and with one of the best rides in the group it is certainly at home in the field or for leisure, rather than on the farm.

## OFF-ROAD EXCELLENCE

#### **CAN-AM OUTLANDER 500**

The Can-Am was the last in the group of combustion engined vehicles that I tested. Around the yard, in both high and low range, the plush progressive throttle mapping instantly won the battle offering fine control. Sat aloft on the bright yellow beauty, you are aware it's somewhat larger than the other vehicles on test. Not a big deal for me, but this is really designed for a recreational market way across the pond. Question is, will it cut the mustard among its hard core work competitors? The off-road route was tackled with no problems at all, in fact it blew the competition away by a country mile. I was astonished with the exquisite ride quality over a heavy ploughed field, its amazing chassis and impressive suspension. The power steering was adjustable on the fly and offered dynamic soft feel, yet retained a nice feed back through the handlebars. This is a surgeon's scalpel among a crowd of bread knives. Sadly this was the only machine to struggle in our towing tests, the machine did the job up and down the steep terrain, however, low range was necessary to achieve the goal, where the others did the job easily in high range, due presumably to higher gearing, as the Rotax 500 is a

punchy power plant. So a chink in its armour as a work tool on a Cheshire hill side, hauling a heavy trailer, and as such possibly not fit for that purpose. Loathed to give the Outlander back, I was dragged from the machine kicking, until I was told its price.



Minus a few add on extras, it came in almost £3000 more than some of the others in the field. Sadly, value for money plays a part in the decision as to a winner. My heart would go yellow in a heart beat, my head – and my wallet – tells me to be sensible and buy the vehicle that ticks every box. Sadly I live the wrong side of the pond, my lifestyle dreams of ripping down endless firebreaks and over dreamy dunes are just that, a dream! WM



Rider has control from push buttons on the handlebars. The Can-Am's suspension gave excellent ride quality over the roughest terrain



# LEGENDARY HONDA FOREMAN 500

A quad test wouldn't be the same without an input from the legendary Honda. This year we had the Foreman 500 in its basic form for the comparison. The Foreman TRX500 is a typical farmer's machine, with manual, foot-operated gears and no-frills specification. With one of the smallest engines on test, the 475cc engine has just 26.6hp, however as it weighs just 272kg, the Honda remains a very lively bike and is fun to drive. As the suspension is quite simple with a single gas strut at the rear, the Foreman ran extremely well off-road and gave a balanced ride. The trusted design

gives excellent starting compared to many of the others, has two brake levers for safe and precise braking and we all agreed it is still a good ATV, but just lacked the modern touches. Gearshifts are awkward using the foot pedal and it was often difficult to change down if your foot wasn't in the right place. At £8058 (inc VAT) it is priced in the middle of the pack but to ensure it was a fair comparison we should have tested the electric shift version (ES), which comes in at £8580, or even the £8940 power steering model. We thought the 'classic' Honda could do with a facelift to put it ahead of the competition and the specification might include some of the present options as standard.





A single gas strut rear suspension is a simple as you can get, but the drum brake is now somewhat dated when compared to the others

# Model Honda Foreman TRX500

ngine	Water-cooled, 4-stroke, OHV single-cylinder
ower	26.6bhp@6000rpm
orque	35.2Nm@5000rpm
isplacement	475cc
ore x Stroke (mm)	92.0 x 71.5
ransmission	5F x 1R Manual
uspension	Independent
WD Selection / Diff-lock	Manual 4WD
uel tank	15-litre
Veight	272kg
ayload/Towing capacity	90/385kg
round clearance (mm)	194
imensions LxWxH (mm)	2127 x 1205 x 1197
rice (inc VAT)	£8058

# FARMERS' FAVOURITE BEHIND THE TIMES

#### **HONDA FOREMAN 500**

For decades the Honda quad has been the staple diet for most farmers, barnstorming reliability combined with long life service intervals, makes the 'Big Red' a firm favourite in Britain's countryside. On test, we had the S model, offering a manual five-speed gearbox and auto clutch. Selectable 2WD/4WD on the move shift works a treat. A push of the starter button fires the 475cc into smooth life thanks to Keihin Efi efficiency. If the battery did fail you, Honda still offers a pull-start to get you home. The single cylinder engine is now mounted longitudinally, this places the crank shaft inline with the chassis, making for smoother power delivery and a lower centre of gravity; all clever stuff. The lower centre of

gravity was needed, as the solid rear swing arm with single shock is not the best set-up for traversing the steep hill on my generic test route. All the other machines in this test leave the Honda in the dark with their IRS specifications. The throttle response was a little sharp, while technical slow riding through the yard became a little aggressive, especially when in low range. And what about that dated rear drum brake? Most other competitors are using internal wet clutch brakes. Honda must have a very good reason for this set-up, but you have to question its antiquity in a crowded hi-tech market. You can already hear farmers shouting at the magazine for my slight Honda negativity. However, I went into this test with open eyes



and was slightly underwhelmed by what might have been thought the firm favourite. It's not that Honda has gone backwards, just the fact the competition is storming forward. My Honda advice would be to go for the slightly more expensive Foreman AT with the CVT transmission. **WW** 

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Finding and rectifying common Land Rover electrical faults has never been easier. Britpart have worked closely with Omitec to design and build a highly advanced Land Rover diagnostic tool. As well as the multi-vehicle professional version a single Land Rover model home use version is available too.

The Lynx interface is Windows\* based and when running diagnostics on a laptop or Windows tablet, far more information can be displayed to the user than on a hand held device. Being Windows based there is familiarity and flexibility with the interface and navigation is much more intuitive.

#### See Lynx in action at lynx-diagnostics.com

#### What does Lynx do?

- Read fault codes
- Clear fault codes
- Read live data
- Test actuators
- Special functions see coverage chart at lynx-diagnostics.com
- · Programming such as alarm settings, key fobs etc.
- Service reset

#### What do you get with Lynx?

- Windows compatible software
- Vehicle Communication Interface box (VCI)
- USB to VCI lead
- VCI to OBD II lead
- Quick start booklet
- Activation form
- Unlock code booklet

#### Carry case with foam insert

# For the workshop and home user...

As Lynx is Windows based, the system is future proofed due to your laptop or Windows tablet hard disk drive which allows for 'many more' numbers of updates compared to hand held devices. Lynx is powered by Omitec who build the T4 - Official Land Rover diagnostics tool. Live data can be displayed using graphics; making it easier to read time based events and the live data can be recorded on the lap top for a comparison, a great advantage over hand held diagnostic tools as they do not usually have storage memory. The Windows based tool allows a simultaneous access to the vehicle diagnostics and consultation of circuit diagrams and other technical information. Allows you to access the internet if you are connected to it whilst diagnosing a vehicle and other such programs you might need to use in a garage environment. Lynx is supplied in a hard wearing carry case with foam insert to protect it when not in use. For the enthusiast home user using Lynx will mean no more trips to your local main dealer to clear any faults on your Land Rover.

#### What do I need?

#### Multi-vehicle professional version

Unlocked for all Land Rover vehicle models

DA6431ESP Spanish English DA6431 DA6431FRA French DA6431GER German

#### Single vehicle home user version

Unlocked for one Land Rover vehicle model only.

Upgradable for extra Land Rover vehicle models at a later date. DA6430ESP Spanish English DA6430

German DA6430GER Home user additional Land Rover vehicle model unlock code DA6434

Extras

14CUX lead - for use with hot wire V8 Efi vehicles DA6432 Upgrade lead - power cable for use with firmware updates **DA6433** 





French

Developed in conjunction with Omitec View live data with intuitive interface

Your complete Land Rover diagnostics tool!







The long travel suspension was great on even the harshest terrain Independent at the rear is a bonus when it comes to heavy towing



# **BIG ON VALUE**

#### **KAWASAKI KVF650**

The KVF650 from Kawasaki is the largest bike in our comparison. Unfortunately, the manufacturer doesn't offer anything else in the power bracket. The bike was also one of the cheapest, so the most power for least money has to be an advantage. The 633cc, 47hp engine takes some starting with its manual choke but, once running, the V-twin engine sounds amazing with some extreme acceleration on tap. As you would imagine, it was clearly the quickest off the mark and with 51.4Nm of torque, one of the best pullers. When taking-off from stationary it took some engine power to it get moving, unlike the Suzuki, for example, that takes off right away. We like the reversing light,

the service and oil access in addition to its good looks, sleek lines and simplicity. All the controls are simple, but we didn't like the single brake and the ignition switch was in an unusual position. The diff-lock lever located in front of the brake was also unlike any of the others. Two storage pockets in the front look to be very handy and the fuel tank filler easy to get to at the rear. We felt the steering to be fairly heavy and it did roll a bit into the corners, but otherwise the suspension is excellent. Power steering is not an option on this bike, which really lets it down. Its inclusion would have increased the bike's appeal dramatically. Overall, we found the Kawasaki great value for money at just £6559 + VAT and ideal if you are looking for a powerful, yet simple ATV for towing.

# Model Kawasaki KVF650

Engine	V-Twin, liquid-cooled, four-stroke
Power	47bhp@7500rpm
Torque	51.4Nm@5500rpm
Displacement	633cc
Bore x Stroke (mm)	80.0 x 63.0
Transmission	Automatic CVT H/L/N/R
Suspension	MacPherson strut / Independent rear
4WD Selection / Diff-lock	Electrical
Fuel tank	20.5-litre
Weight	273kg
Payload/Towing capacity	130/567kg
Ground clearance (mm)	245
Dimensions LxWxH (mm)	2195 x 1165 x 1235
Price (inc VAT)	£7,870

### **TORQUE LADEN V-TWIN**

#### **KAWASAKI KVF650**

Clearly not a 500cc, but Kawasaki simply doesn't make one. So this is the nearest competitor the others in the field have from the famous green stable. I like the simple clean lines of the green machine, the high mud fenders give a clue to its long travel independent suspension; bliss on harsh terrain. When in the saddle the simple to read LCD multifunction central gauge gives all the info needed and no more! Two power outlets give charging options for your devices. Below you is a punchy torque laden V-twin motor that initially I thought was going to give much better value for money than the other test machines. Sadly, the non-Efi engine was a little fussy with the choke setting, especially when the engine was warming up. That aside, the machine was nice to use, handlebar controls for the 2WD/4WD is smooth and the front difflock is manually controlled via your left fore finger giving more aggression with more lever pressure. Decent steel racks give a perfect load platform to work with. The unique sealed multi plate rear brake completely secures



the braking components from the ingress of mud and dust. IRS Suspension adds ease to heavy towing, demanding descents or traversing inclines. A nice vehicle to live with, on a daily basis, offering a plush ride quality, great towing ability and excellent value for money considering it's a 650, although sadly lacking in Efi technology, and no power steering options. Despite this, however, it's great value for money, a smart package with proven heritage, and great performance. A serious contender, WM

DA6430FRA



# RUGGED **BARGAIN**

#### POLARIS SPORTSMAN FOREST 500

Undoubtedly the most rugged here, the Polaris Sportsman Forest 500 is the cheapest of the bunch we tested and, like the Honda, was a tried and tested design. The Forest 500 looks very dated but appears over-engineered. At £5799 + VAT, you get a lot for your money, plus, if you are an NFU member, you save a further five per cent on the retail price. A full road lighting kit is standard, unlike some other manufacturers models. The front rack also folds forward to reveal a very generously sized storage box, ideal for

Honda, which we feel gave average performance. A four-position gear lever sprouted from the right-hand side, giving a very notchy change and you have a habit of smacking your knee with it. The driving position isn't the best either, as the seat cushion is very wide and after a time we felt it became uncomfortable. The Polaris again only has a single brake and steering is challenging at times. At speed the suspension feels rough and cornering difficult, yet it is surprisingly good on towing and reassuringly stable with some weight behind. We all felt it is an out-dated bike but had value and compact dimensions on its side.

those handy everyday tools. The 496cc

engine has a similar power to the







Selectable four-wheel drive from a button on the handlebars. A built in winch would be a bonus for many operators. Good when towing, and reassuringly stable with some weight behind it

# **A REAL WORKHORSE**

#### **POLARIS SPORTSMAN FOREST 500**

I have always had a soft spot for the Polaris ATV, but this real world farm test was the first time I had used the American machine in a true working environment. Polaris has been going from strength to strength over the past few years. Cracking the Honda dominated UK market is quite a challenge for the US manufacturer. The Sportsman is a workhorse, that can be adapted for recreational use. The 496cc single cylinder engine is strong, and offers good hauling torque, blighted by the lack of Efi. In a world of 'push button and go' technology, Polaris, like Kawasaki have forgotten to move forward in the engine management department. As a result, the Sportsman is a pain to keep running smoothly when not up to working temp. Also the throttle was a little too aggressive in close confines. The chassis is good, offering excellent ground clearance and a nice plush ride when pushed hard. My right knee developed a bruising from the shift lever smacking my leg when reverse is required. However, the Polaris is a useful tool, offering the most integrated storage of any ATV, letting you stow-away tons of gear and still have access to it, even with loads tied to the deck. The

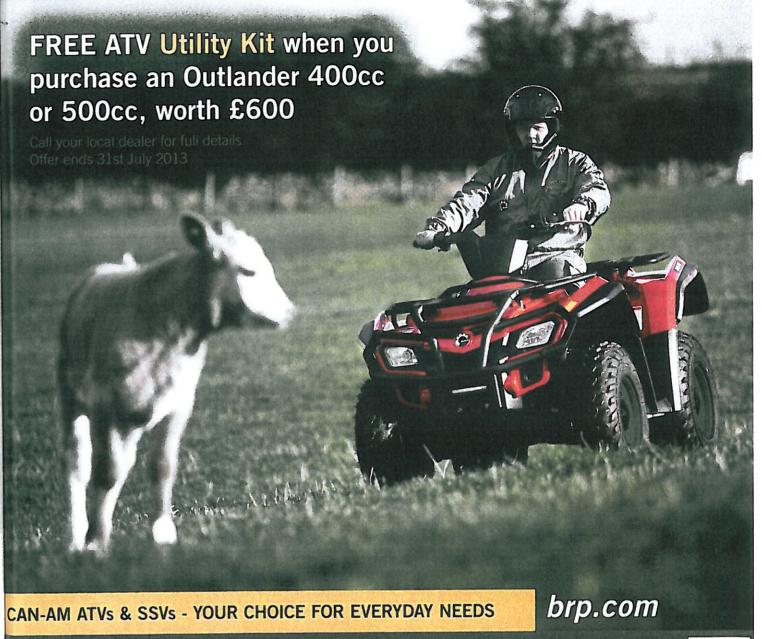
Sportsman lives up to its hard working reputation with a 1225lb towing capacity, so you can tow trailers loaded with material and kit. Our test found no need to engage low range. Compared to the Suzuki, I found the Sportsman feeling a little dated and lacking in comparison. True AWD keeps you moving, automatically engaging all four wheels when you need more forward



traction and reverting back to 2WD when you don't. Other ATVs use a limited-slip differential, engaging only three wheels. Traction on our test day was never an issue, due to this system. WM

# Model **Polaris Sportsman**

Engine	4-Stoke, Single-cylinder
Power	27bhp
Displacement	496cc
Bore x Stroke (mm)	92.0 x 75.0
Transmission	Automatic CVT H/L/N/R
Suspension	Dual A-Arm / Single Shock Swingarm
4WD Selection / Diff-lock	Electronic / No
Fuel tank	15.5-litre
Weight	179kg
Payload/Towing capacity	163.3kg
Ground clearance (mm)	145
Dimensions LxWxH (mm)	1651 x 1067 x 1067
Price (inc VAT)	£6958



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# **BACK TO IMPRESS**

#### **SUZUKI KINGQUAD 500**

Having done extremely well in previous tests, the Suzuki KingQuad 500 is back to impress in 2013. Like the Kawasaki, we loved the look of this ATV with its modern shape, in addition to its practicality. The KingQuad boasted a pretty impressive specification including power steering, independent suspension, electronic four-wheel drive and front diff-lock. The CVT transmission is extremely smooth to engage using a left-mounted gear lever and we agreed it is definitely the best of the bunch. The push-button four-wheel drive was clearly displayed on the dash, with a slide switch to operate the front differential. Suzuki also supplies a number of watertight storage boxes, a vertical cylinder in the wing and slide-in,

horizontal storage box at the rear. We also noted an excellent filler/dipstick for the rear axle and wide mud flaps were better than most. Driving really was a pleasure thanks to its power steering and silky-smooth suspension. Around the yard it is by far the easiest to manoeuvre and, when towing, the 38.2hp engine was easily capable of handling any loads and hills, it really was a pleasure to drive thanks to the smooth uptake of the transmission.

The only things we can really criticise this bike for was the engine oil dipstick access as a side panel would have to be removed, which is no quick job. In addition, it felt taller than the others, which meant stability could be an issue with inexperienced riders. Priced at £7299 +VAT the KingQuad 500 is just right for the specification on offer and buyers also benefit from a free driver's kit, which includes overalls and a body warmer - ideal!

# Model Suzuki KingQuad 500

Engine	4-Stroke, single-cylinder, SOHC
Power	38.2bhp
Torque	N/A
Displacement	493cc
Bore x Stroke (mm)	87.5 x 82.0
Transmission	Automatic CVT H/L/N/R
Suspension	Independent double wishbone
4WD Selection / Diff-lock	Electronic / Front diff-lock
Fuel tank	17.5-litre
Weight	302kg
Payload/Towing capacity	90/450kg
Ground clearance (mm)	260
Dimensions LxWxH (mm)	2165 x 1250 x 1285
Price (inc VAT)	£8759



The Suzuki's KingQuad has something of an agressive front design, very modern in looks and something of which we fully approved!



# IMPRESSIVE TORQUE DELIVERY

#### SUZUKI KINGQUAD 500

My first real experience of a Suzuki quad was this test. Yet climbing onto the saddle of the tall red KingQuad was strangely all familiar, with its well-placed controls and comfortable riding position. A simple yet extremely handsome design makes the Suzuki a pleasure to look at. The 493cc single cylinder fired in to life without a splutter thanks to the efficient Efi fuelling. The automatic gearbox was smooth and efficient as too was the double wishbone IRS suspension, making our hill transverse test a breeze with a little shift of your body weight. The five-way adjustability on the spring pre-load suspension is an excellent option, allowing you to alter depending on the job in hand that day. Running with a light load, I kept the springs set to a soft setting, giving me lots of plush travel at speed over rough terrain. Intriqued by the power steering decal

on the nose cap, I went for a slow controlled meander, worming my way through the busy farm yard traditionally a place where heavy steering would make for tired shoulders at the end of a heavy day. The steering was beautifully delicate allowing me fine control with little effort from the operator, sadly you need to squeeze the throttle before the steering became powered, I would have preferred this to be active without the throttle. Brakes are hugely efficient without being too aggressive. Front and rear load decks are well appointed and despite a heavy trailer being attached the KingQuad rarely needed low range due to its impressive torque delivery. Super smooth shaft drive keeps maintenance low and the front diff lock makes for very progressive progress in any terrain. The KingQuad is a great package, truly a force to be reckoned with. WM











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# ELECTRIC FUTURE

#### **ECO CHARGER**

Perhaps the most exciting part of the ATV test for us all was experiencing the Eco Charger electric ATV. There have been a number of electric bikes in the past, but none as effective and designed for such a wide range of uses as the Eco Charger. Offering quiet running, efficiency and high torque, this new ATV has a lot going for it. We were initially sceptical about how it would perform on agricultural tasks but were pleasantly surprised.

The Eco Charger uses a very efficient motor, as used by the military, to propel the ATV up to 36mph. Operating in four gears, a low and high box with a splitter in each, the correct range can be selected for the job to ensure the best efficiency is achieved. However these could do with some refinement as the splitter lever sticks out awkwardly. A high-neutral-low 'flip' switch controls direction changes, which is very convenient. The handbrake lever design was an excellent idea, we thought, as it folds across the accelerator to avoid accidental acceleration. Jumping aboard the Eco Charger for the first time takes some getting used to, adopting the necessary mindset of shooting around with no engine noise is incredible. This makes it ideal for farms or sites where environmental issues, especially noise, might be a problem. Even at top speed the motor doesn't sound noisy and is extremely smooth. Acceleration is amazing and the bike really comes in to its own on very steep banks. In a class by itself, the bike can crawl at any speed



The Eco Charger's military-based electric motor is very quiet - and very impressive

with no slip up the steepest gradients thanks to its weight and advanced motor. Put it in low and torque is incredible, scaling amazingly steep, long climbs can be safely achieved. Also, when descending, the ATV can be placed in reverse and will offer incredible engine braking without slipping; we were so impressed with this feature. Electric regeneration braking provides extra topping up of the battery and also extends the brake life. Powering the bike is down to 12, deep-cycle 7.2kw batteries, which are claimed to have a life of around six years before requiring replacement (at around £700). By changing the charging cycle, 1800 cycles can be achieved as opposed to 800. Battery level is shown on an LCD display just ahead of the driver and generally it can last between 30-35 miles depending on use.

The manufacturer claims that charging costs are £62 per year at around 50p per night, off-peak, which equates to around 1.1p per mile, showing that savings can clearly be made. A general charge is around five hours from flat, with eight hours for a full cycle, but three to four hours is usually enough to keep it going in the day. When towing, the Eco Charger pulls heavy loads in the higher ranges but in most cases it was better than the petrol ATVs in low range. Steering is also very heavy due to its weight, which could also be an issue for some and the all-round independent front suspension is smooth.

The biggest issue for the bike for farmers was the price. At £8750 + VAT it was one of the most expensive on test and, to its detriment, looks quite dated compared to the others which at first glance may put them off before hearing the facts. However with fuel savings on average of up to £1500 a year, and with healthy resale values, the Eco Charger will save a considerable money the years. Our overall feeling is that the Eco Charger definitely has a place in the market but needs to be refined to the level of finish of the other bikes to help justify its price tag and superior efficiency. If you need a cheap bike to run, which is quiet and offers superior traction, then it is worth a try."

# A REAL CHALLENGER

#### **ECO CHARGER EV ELIMINATOR 4X4**

It would take up most of this magazine to do this vehicle any justice. So much to say and so little space. Initially, my thoughts were that it was impossible to place this new eco ATV in among our test group. After an initial drive however, I was raring to put the Eliminator through the test route the other ATVs had encountered. Its motor, the heart of the Eco Charger, is quite unique. Designed specifically for military applications, it produces no heat and gives almost 100 per cent torque from a stand still. These figures look impressive, and believe us, this is unbelievable stump-pulling performance. Running the same terrain with the Eliminator was simply outstanding, the massive torque output from a standing hill start, means this thing would pull all the other machines up the steepest of hills, with no noise or fuss. The benefits are endless for this Eco ATV, gaining access to sensitive areas that a combustion-engined quad would simply offend. Operating the Eliminator took two minutes to learn, high and low range, forward and reverse with a splitter gearbox giving even more low speed control and massive hauling performance. Front and rear diff locks

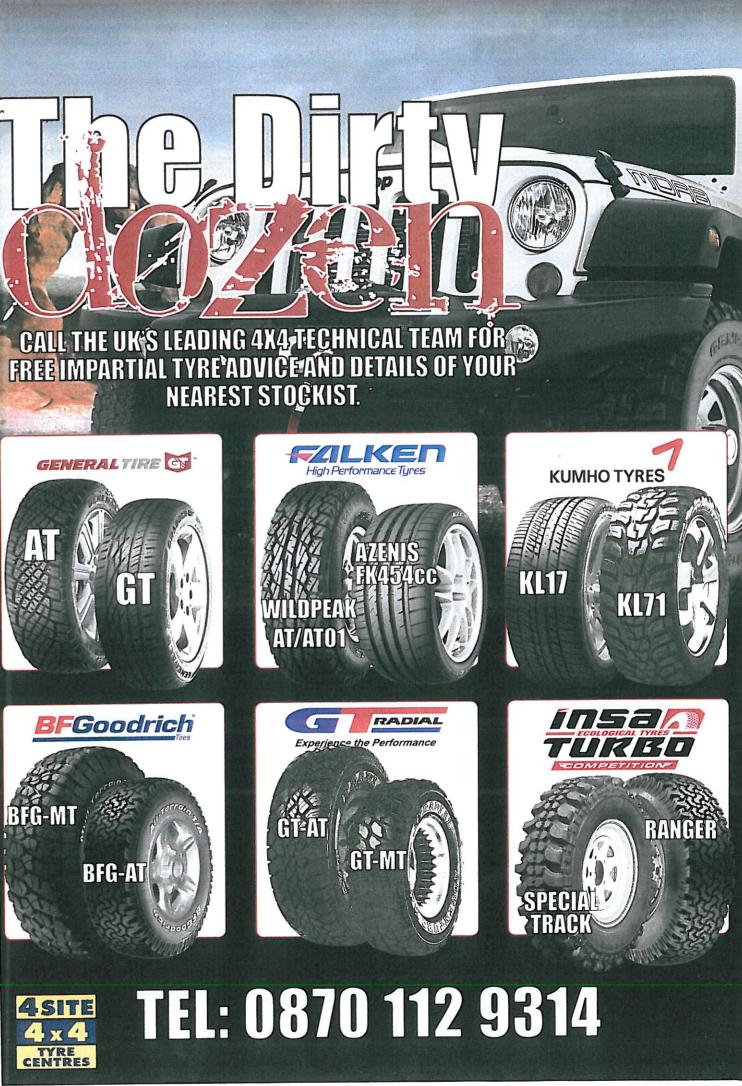
are a manual leaver operation that we never found the need to use. The clever regenerative charging gives a feel of Land Rover's HDC on steep gradients, this off throttle descent technology also helps recharge the bank of batteries between your legs. The claimed cost of use is the most impressive part of all at £62.00 per year using economy charging of a night. A mile for



mile comparison of a 500cc equivalent quad is said to be over £1100 per year, and you have the benefit of zero road tax for those who need to use the lanes from time to time. The Eco Charger Eliminator was not an outsider by the end of our test day, but a real challenger for this 4x4 crown. It's early days for the British company, but they have created a new seed that will grow into a whole new sector. I only hope they get the machine's styling and ergonomics smoothed out before a giant like Honda muscles in and recognises the potential. **WW** 

# Model Eco Charger

Engine	Electric motor
Power	20bhp
Torque	100%
Displacement	N/A
Bore x Stroke	N/A
Transmission	F/N/R 2 Ranges with H/L Splitter
Suspension	Independent Front and Rear
4WD Selection / Diff-lock	Mechanical cable / F&R
Fuel tank	Approx 30+ miles per charge
Weight	500kg approx
Payload/Towing capacity	N/A
Ground clearance (mm)	N/A
Dimensions LxWxH (mm)	N/A
Price (inc VAT)	£10,500





#### OUR CHOICE TOUGH DECISION

After spending plenty of time on the bikes in a number of situations it was clear to see the strengths and weaknesses of each. It was quite obvious that there were two contenders for the top spot - and they were both Japanese. The Suzuki and Kawasaki were strong players on our test thanks to their drivability and value for money. We considered the Kawasaki offered the most value for money thanks to its 650cc engine and excellent drivability but, overall, the Suzuki had the edge, thanks to its power steering and slick gear change. Sadly, the Kawasaki isn't available with this option, which really does make all the difference these days. The KingQuad 500 felt more practical and really couldn't be faulted on the day, with buyers even receiving a free driver's kit including overalls and a body warmer. It is also likely the Yamaha would have scored highly too. With Kawasaki in second place, third place was a tough call. In the end, we reached the decision the Can-Am and Eco Charger would receive the place jointly. The Can-Am boasted a very impressive specification with advanced power steering - better than every other, excellent ride and smooth power

uptake from its Rotax engine. However we felt it a bit over complicated for farm use and when towing, it struggled to pull heavy loads in high range and it felt like a bulky machine around the yard. It certainly looks one of the best and with one of the highest prices of the test vehicles, it would definitely stand out from the crowd, although a non-EC homologated model takes the price down to £8199 + VAT making it

Suzuki's KingQuad

more competitive. The Eco Charger, with its similar price, gives unrivalled traction and control on steep banks plus excellent energy savings, however, its design and build isn't quite up to the standards of the winners. If development saw the Eco Charger refined to the levels of the Japanese bikes, then there's no doubt it could be a very strong contender for the top spot in the future. 4x4



# You could also try....

Besides the models tested, there are others on the market to consider

#### ARCTIC CAT

The Austrian-based manufacturer Arctic Cat have been available in the UK for some time and are one of the only manufacturers to produce both petrol and diesel models. The Arctic Cat 550 offers 545cc from a liquid-cooled 4-stroke engine and weighs in at 318kg, making it one of the lighter bikes available on the market. Priced at slightly more than most of the bikes on test at £7908, the 550 can tow 476kg and has good ground clearance at 279mm. Arctic Cat also offers the 700 ATV, which uses a diesel engine, which comes in at £9588 including the VAT. Offering savings with using diesel, it also has a capacity of 686cc on tap and can tow up to 500kg, though could possibly tow a whopping 1050kg if required off-road. It is a shame we couldn't have got this bike on test to compare and see how the diesel bike compares, but it is certainly worth considering when making a purchase for farm or towing use. Photo for illustration only, specification may vary.

Arctic Cat 01702 710658 www.arcticcat.eu



#### DALESMAN

The Dalesman brand of ATV is offered by Shire Tractors who have recently entered the ATV sector with a choice of both ATVs and UTVs. Two of their ATV's, the Dalesman 500cc and 500cc Xtra (a full two seater) with a V-twin diesel are currently being trialed by the Royal Corps of Signals for release later this year. The Dalesman offers excellent value for money as it comes road legal as standard, with a 1000kg winch, aluminium 'A' frame, stainless steel exhaust and six-ply tyres all thrown in too. Four-wheel drive is electronically selected, along with the front diff lock, which are joined by an LED display, handle bar protectors and rear view mirrors. A hall hitch and seven-pin socket are also standard. The rear suspension is independent, with a passenger seat adding £41, camouflage paint adding £150 and alloy wheels another £295. Priced at just £4250 and £4595 + VAT, the Dalesman



appears to be one of the most affordable ATVs on the market.

Shire Tractors 01200 657657 www.shiretractors.co.uk

#### FARI

Another very affordable and well-specified ATV is the FARR HS500. Although the HS500 has become the best-selling ATV for the company, it is still very much undiscovered. Like the Dalesman, it comes with an impressive specification as standard. These include electrical four-wheel drive and diff-lock, 1000kg winch, road liahtina kit, seven-pin socket, CVT transmission with a 'park' position, fully independent suspension and full LCD display. With 27bhp on tap and 35Nm of torque, the HS500 looks an attractive package, especially as it is now on offer for the price of £4799 + VAT. Sadly the FARR wasn't available for us to try, which was a disappointment, but if price is a big factor it is worth checking it out before buying a leading brand.

FARR UK 01392 44488 www.farruk.com



#### GB

TGB fully road legal ATVs are imported by HQB Sport and Leisure Ltd based in Hampshire. The company has over 15 years experience in the trade supply of high quality vehicles to the ATV industry and this is all they sell. The TGB models boast a superbride and build quality and are backed-up by a full two-year parts and labour warranty. The Blade range spans from 287cc up to the 503cc Blade 550. The Blade 550 SE is

the largest model available in the range and comes equipped with front and rear racks, towing equipment and a winch as standard. Available in green or white, the 550 SE is priced slightly more than many of the lesser-known models at £7399 inc VAT, but it does offer 41bhp from a 503cc engine and is slightly heavier at 364kg.

TGB ATV 01264 889012 www.tgbatv.co.uk



#### **YAMAHA**

Yamaha has always been a key player in the ATV market, again we couldn't get their 550 EPS model on the farm. The Grizzly 550 EPS has been out for a number of years now and has been a strong seller for the firm. Sharing many of the characteristics of its larger brother, the Grizzly 700, the 558cc Grizzly 550 offers an attractive package with Yamaha's three-position 'On Demand' drive system offering a choice of two, four or four-wheel drive with diff lock. An exciting and clear digital instrumentation pod provides a full rundown of speed, engine hours, fuel and transmission status, and a double trip meter. The 550 also comes with benefit of power steering and the Ultramatic automatic transmission, also a new shift lever with a park position included. Available in a green or camouflage paint scheme, the Yamaha also has a two-year warranty. Priced at £9188 including the VAT, it is at the top end of the market but would be strong competition for the other class leaders.

Yamaha 01932 358000 www.yamaha-motor.co.uk



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