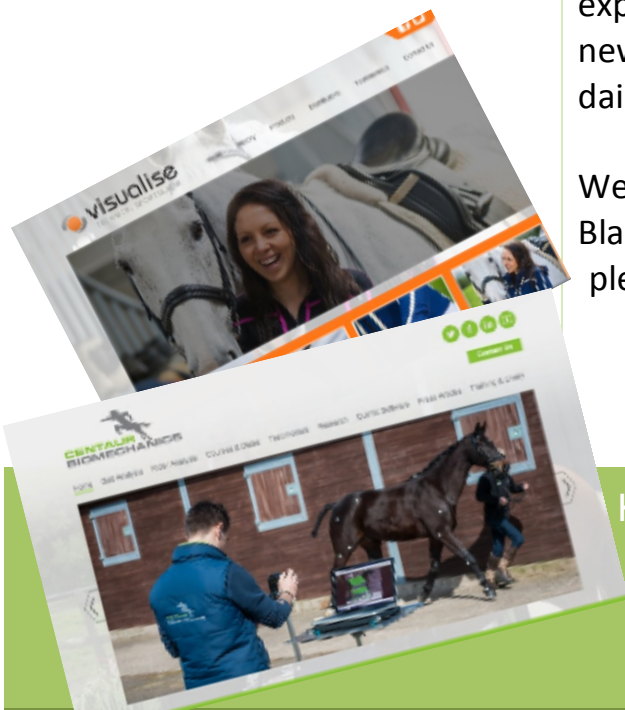
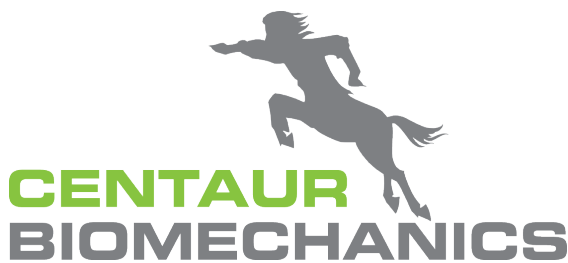


# Centaur Biomechanics

Issue 6 – Summer 2015



## Where Has The Year Gone....?

Where has the year gone? It only seems five minutes ago that I last wrote our spring newsletter. So much has happened since then and, as always, I like to use our quarterly newsletters to keep you up to date with what's happening and our plans for the next few months. We hope that your season is well underway and is going as planned. We are just back from the Senior Dressage European Championships in Aachen - what a great experience that was. We hope that you enjoy this newsletter and as always please keep up to date with daily goings on via our social feed and website.

We will be at Burghley Horse Trials, Eventing Europeans at Blair and BD National Championships. If you are visiting please call by and say hi!.

Keep up to date with news, courses, products and events on our website and social feeds.

[www.centaurbiomechanics.co.uk](http://www.centaurbiomechanics.co.uk)

[www.visualisesportsear.com](http://www.visualisesportsear.com)



## What is Equine Motion Analysis ?

Sports science and sports medicine are well-established areas within human medicine. Professional athletes in many disciplines apply a multitude of sports enhancing techniques to attain a higher level of performance and move ahead of their competitors. In addition, an ever-increasing array of technologies and treatments are available to aid diagnosis, accelerate rehabilitation and ultimately enhance performance. A similar trend is emerging within equine sport. Individual sports organisations are looking for ways to improve competitiveness and professional bodies, such as the British Equine Veterinary Association (BEVA), are actively promoting the application of Evidenced Based Veterinary Medicine (EBVM). In addition the number of competition horses continues to grow, along with the competition for the top prizes.

Centaur Biomechanics has been focused on bringing established human and equine sports products to the wider equine industry to aid diagnosis, promote health and enhance performance. Further focus will be on products and services that are non-invasive (and therefore easy-to-use and can be applied "in the field") and support EBVM. Currently the assessment of equine locomotion and lameness is carried out visually and cannot be reliably or consistently quantified. Equine practitioners often disagree on the extent of lameness. In addition, the assessment cannot easily be communicated and has very little or no historic value. The objective measurement of lameness and changes in locomotion are the missing pieces of critical information needed to make key decisions related to equine health and performance. Quintic is a video based equine gait analysis system which has been developed in partnership with leading human biomechanics specialists. The system has been developed to address the need for lameness diagnosis, treatment monitoring and performance enhancement. It is currently being utilised within the elite sport of dressage as a method of objectively analysing equine gait as a performance enhancing technique. The application of the system is not limited to dressage, providing similar benefits for performance horses in general.

To date, Centaur Biomechanics has assessed several thousand horses, ranging from riding club to Olympic level alongside research studies. In previous years it has been seen that biomechanical testing was only available to those elite horses and riders competing at a high level. However, biomechanical analysis has advantages from which all sectors of the equine industry can benefit. Equal to performance is its use in injury prevention and maintenance. Biomechanical testing has been used widely as part of a lameness prevention programme. In addition, as the number of sport horses continues to grow, along with the competition for the top prizes, it is becoming more apparent that the prevention of injury to sports horses is a fundamental factor in maintaining and improving performance. This trend is highlighted by the aforementioned inclusion of biomechanical testing to test the Fairfax Performance Girth on the run up to London 2012.



## Aachen – Dressage European Championships

As I write this newsletter I am fortunate to be sitting in the Aachen stadium watching the European Dressage Championships – what a championships it has been with Team GBR taking team silver and Charlotte and Valegro taking individual golds. The atmosphere has been electric and I can't help but be in awe of these athletes – the demands placed on them are so high yet they perform with such elegance. As always with key events, I have captured some amazing slow motion footage highlighting the supreme athletic ability of the horse and rider. Please look online at our videos where you will see the link.

I have to commend the German training system- the exposure they provide for their young horses. During the breaks most venues provide little entertainment – Aachen turned that on its head as they brought their foals, young horses and stallions in to the stadium – it was absolute chaos! However, I was left thinking – what a great start for these young horses – great exposure. All in all it was a fabulous championships and I cannot wait for the next one.



## New Lab at Centaur HQ

We are delighted that we have had a purpose built lab / classroom built at Centaur HQ, Moreton Morrell. This will allow us to run our biomechanics courses from there along with research projects. We also have a great schedule of training events with international trainers starting early 2016.



## Press Update

We have had a busy run with the press over the last few months. We were absolutely delighted to have been given the opportunity to feature in a documentary for FEI TV. The day was great fun and the footage, which has been seen in over 33 countries, has now finished its airing and is available on our website. We have also been involved in various magazine articles: Your Horse Magazine featuring our rider biomechanics sessions and Visualise jackets and a second article in Your Horse Magazine – great facts about horses- and we're delighted that British Dressage have written a fantastic article on our rider conference. Keep an eye on the press section of our website for future articles.

## Visualise Training Products

Visualise Training Products bring you good quality products which look stylish and smart, yet serve a direct purpose of helping to improve your position, technique and performance and improve your horse's way of going. The patented Visualise range has been designed by Russell Guire, founder of Centaur Biomechanics.

Through Russell's work, Visualise was designed and tested in 2011 and is being used by riders and trainers all over the world. The simple yet effective design allows riders and trainers to see at a glance any positional weaknesses and as a result make corrections and improve the rider's position.

Since the launch, Visualise has seen the development of additional products and more recently the Visualise training reins which have proved very effective. As a company, Visualise's goal is to design innovative products which can help riders and trainers of all levels improve their riding and horse's way of going. We have our latest GBR jacket launching at Burghley Horse Trials.

**We will be at Burghley, Eventing Europeans at Blair and BD Nationals**



## British Dressage National Championships

Centaur's Russell has had a great season competing Rosie Bush's 18hh spotty horse – Tresaison Roulette. They have had numerous wins on the run up to the regionals. Russell competed at Addington Regionals, coming second in a huge class of 50 and qualifying for the National Championships at Stoneleigh in September. The Nationals will be busy this year with Russell competing, plus running the Centaur / Visualise stand, as well as providing performance analysis to the World Class Equestrian Programme – Dressage. If you are visiting please call by and say hi.





## Research Update

Since our last newsletter we have been progressing well with the various projects. We have had a second play day looking at the effects that one or two studs have on limb movement when turning on a tight circle. This project is providing interesting data, however, with so many variables the data is not currently sufficient to be conclusive, so we are planning a third day and will increase our trials to see if we can see a trend.

Russell's PhD is coming along nicely with the first experiment planned for later this year – this will be a great goal to achieve as this experiment will map out the next five years' research. We are delighted that a project which we did a while back has now been published, **"A comparison of the position of elite and non-elite riders during competitive show jumping"** Comparative Exercise Physiology 11 (2) 119-125.

We have also submitted our bridle research and are awaiting final review. We are hopeful that by the time we write our next newsletter we will have published that. We are pushing ahead with our research – please keep an eye on our Facebook feed as we are always looking for subjects to help within the trials.



## Rider Conference 2015

The vision of this year's rider conference was to inspire, educate and provide a fabulous atmosphere and boy did it deliver. From start to finish the conference was electric, with the conference room buzzing with excitement at what was being delivered.

The conference had 9 internationally renowned speakers on hand to offer advice, information and tips, which delegates could implement straight away. From the feedback it is clear to see that all who attended have taken a lot of useful information and left the conference feeling inspired. We are delighted that we got an overall score rating of 9.80 / 10.

Following on from the conference we received feedback, letters and emails thanking us for organizing the event plus, more importantly, explaining how the conference had helped them immediately – for which reason alone makes me very happy. My vision for the conference was to provide information of a world class level to riders, trainers and therapists of all levels which would be of benefit to helping them improve their riding and confidence and I am proud to say we scored 9.80 / 10. I feel it safe to say we delivered!

We have already started planning next year's event, which is going to be bigger and better – no pressure Russell. Save the date June 2016 @ Moulton College, Northants.

### Read BD article and other articles on our website

#### CENTAUR BIOMECHANICS RIDER CONFIDENCE



JANE CARLEY reports from Centaur Biomechanics' inspirational rider confidence clinic and discovers how correct mental and physical training is the key to success



Centaur Biomechanics' two-day

"In terms of communication, 85% is

Video footage showed her juggling balls

## testimonials

"I have used the Visualise Jacket with both able-bodied and disabled riders who have varying degrees of asymmetry. The jacket enables me to highlight areas of postural adaptation and potential weakness that may not be apparent initially when observing them."

Helen Mathie, Team GBR Physio to Para Equestrian Team

"The Visualise jacket provides the trainer with a clear picture of the rider's position enabling small corrections to be made."

Gill Watson, International Eventing Trainer

"A very useful, new tool that makes you even more aware of your straightness. An excellent tool for trainers to use on their riders during lessons to help evaluate straightness."

Pippa Funnell, International Event Rider

"The Visualise jackets are a superb training aid."

Judy Harvey, International Dressage Rider & Trainer



UK Distributor – Centaur Biomechanics

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visualisesportswear.com  
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Poland  
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Italy  
Australia

Please see website for details.



Products Designed To Improve Your Position



## visualise product range 2015/16

### Lightweight, Breathable Training Jacket

Black with green or pink lines  
XS, S, M, L, XL  
Prices start from £55.00



### GB Lightweight Training Jacket

Navy with red and white lines  
XS, S, M, L, XL  
Prices start from £55.00



### Visualise Winter Soft-shell Jacket

Windproof, showerproof and breathable

Black with green or pink lines  
Navy with cream thumbs  
XS, S, M, L, XL  
Prices start from £65.00



### Visualise Training Gloves "Thumbs on Top"

Black with green or pink thumbs  
Navy with cream thumbs  
XXS, XS, S, M, L, XL  
£20.00



### Visualise Training Reins

Designed to help stop the reins getting too long  
Black or Brown  
Full  
Prices start from £65.00



### Visualise Fly Bonnet

Black  
Full  
Prices start from £20.00

### Visualise Multi-sport Shirt

White or black with green or pink lines  
XS, S, M, L, XL  
Prices start from £25.00

Visualise jacket worn by Jade Clarke with Adelinde Cornelissen, fitness and mental coach, at Centaur Biomechanics Rider Conference 2015.



Visualise training tops, are currently being used within the British Equestrian Federations World Class Programme, as a training tool to help improve riders position and performance.

## how visualise works

Scientifically Proven to Improve your Riding

### Visualise Jackets

Research carried out by Hartpury College found that using Visualise jackets helped coaches to improve both their coaching and their ability to evaluate the rider's position. In addition to this, they found that the riders benefited from the use of the jackets by being able to see for themselves their postural weaknesses more quickly.

### Visualise Training Reins

By the use of velcro and a special glove, Visualise Training Reins help the rider to maintain a more secure contact, as when the hand is opened - which results in the rein becoming too long - the rider will receive feedback from the rein and glove interface, thus helping to provide a signal for the rider to close their hand and hold the rein more securely.

### Visualise "Thumbs on Top" Gloves

The Visualise "Thumbs on Top" Gloves allow riders and coaches to see at a glance the rider's hand position - with the use of different coloured thumbs the rider and coach can easily see a correct or incorrect hand position.

### Visualise Multi - Sport T Shirts

Similar to the Visualise Training Jackets - we now have Visualise Multi Sport T Shirts which apply the same concept as our equestrian jackets. They can be used for Pilates, Golf, Running and Yoga.

### Visualise Fly Bonnet

The Visualise Fly Bonnet helps riders to determine which way is "Left" and "Right". It is also useful to determine if the horse is crooked and has a head tilt - both of which can be determined more quickly with the use of the fly bonnet.

Research has shown that we are Visual learners - using Visualise Training Products will enhance your learning process.