

Science in the saddle – the future in equestrianism

Dr Jack Murphy, IRCSET Equine Research Fellow at UCD, discusses the findings of an international equine seminar recently held in Dublin

EQUESTRIAN sport has been to the forefront in recent weeks with the Fáilte Ireland Dublin Horse Show, Millstreet Show and Irish equestrians competing within the various disciplines at the Olympic Games.

All sporting activities have become increasingly technical and the application of scientific methods to measure, assess and improve performance is now commonplace in an increasing number of sporting activities.

Equestrianism is no exception to the scientific approach. There have been many advances in terms of genetic approaches to horse breeding programmes, equine dietary and nutritional progress and improvements in terms of equine exercise physiology.

Equine scientific researchers routinely attempt to identify best practices in the production and management of the equine athlete in terms of health, welfare and performance.

Some 260 delegates from more than 25 countries attended the fourth Conference of the International Society for Equitation Science at the RDS, from August 1st-4th. The visiting delegates arrived from almost every European country, Australia, New Zealand, Canada and the USA.

The International Society for Equitation Science (ISES) is a professional organisation devoted to the scientific study of equestrianism, horse welfare and equine training methodologies.

The society's mission is to encourage the application of objective research and advanced practice to improve the training and welfare of horses in their associations with humans, covering all practices of equestrianism, including leisure riding, training and elite competition. ISES also offers a pool of expertise to national governments, international bodies, industry and equine welfare organisations.

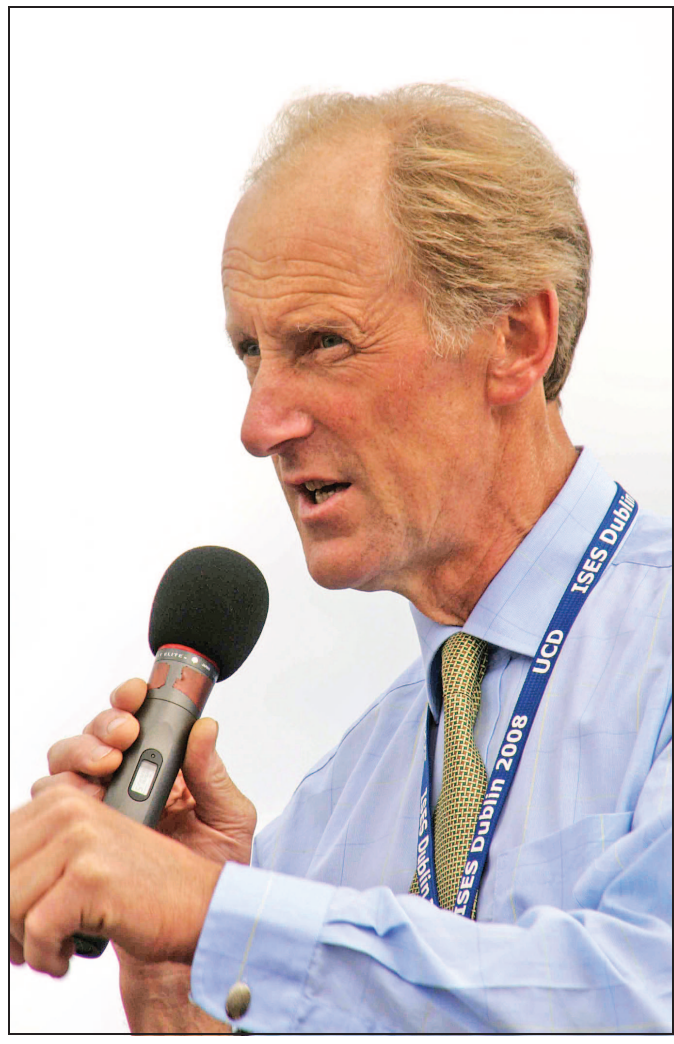
Both Horse Sport Ireland and Connolly's Red Mills recognised the progressive nature and significance of the ISES conference and its contribution to equestrian sport. The stylish leather portfolios courtesy of Connolly's Red Mills and smart polo shirts with ISES and Irish Sport Horse Stud Book logos were much appreciated by delegates.

Dr Tony Scott, RDS President and previously Dean of the Faculty of Science at UCD, performed the official opening address at this year's ISES conference.

Having welcomed the delegates, Dr Scott gave a brief history of the RDS's involvement in equestrian matters since its foundation in 1731. He outlined the obvious similarity and synergies between the ISES and the RDS, where both parties are actively involved in seeking continued improvements in



• Australian practitioner Diane Jenkins during the ISES Dublin 2008 practical session



• Eric Smiley FBHS was the keynote speaker

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CEO of Horse Sport Ireland (HSI), Damien McDonald attended the conference in his capacity as chair for the keynote opening session. McDonald gave a brief synopsis of HSI and spoke of the importance of science as a critical component in the future development of a vibrant sport horse sector.

He acknowledged the work of ISES and he spoke of how the scientific approach influences equine breeding programmes, training and production systems and welfare for sport horses from leisure to top equine athletes.

The keynote speaker was Irish Olympian, Eric Smiley FBHS and his paper entitled: "The horse-human dyad: Practise perfect to perfect practice" was a truly engaging insight into the challenges facing modern day horse enthusiasts.

Smiley outlined how competition pressures tend to produce instinctive responses (on the part of horse and rider) but went on to describe in great detail how and why it is the function of good training to ensure that this instinctive reaction is in fact the correct response.

Following the address, McDonald opened the Smiley paper for discussion and numerous delegates participated in an enthralling discussion session.

These included leading academics, veterinarians, clinicians

and riders from around the world and this set the tone for the remaining three days of the conference. Education and training features as a basic tenet of the HSI philosophy and much useful, timely and appropriate research materials were under discussion during this ISES conference.

Overall, there were more than 100 scientific papers delivered during the three days in the form of longer plenary sessions, shorter oral sessions, poster exhibits and practical equitation displays.

WITH so many international delegates in attendance, networking opportunities were readily available throughout the meeting. Indeed, during the coffee/lunch breaks and poster sessions, the delegates had opportunity to view the innovative equestrian science displays and discuss topics, scientific methods and results with the authors in attendance. Some 150 delegates enjoyed the working conference dinner in Bewley's Ballsbridge.

There were two practical sessions, which took place on both Saturday and Sunday on the Granville Nugent Gel-Track arena in Simmonscourt. These sessions included various practical equitation demonstrations and proved extremely extremely popular.

The first session began with Avril O'Byrne from HSI and John Ledingham in charge of an equitation coaching and training display based on the HSI Level 1 & 2 Coaching Programme. The Army Equitation School personnel under the command of Lt Col Gerry O'Gorman provided the horses and riders.

The second instalment of this practical session involved a short appraisal of some of the training aids regularly used (often incorrectly) by many horse enthusiasts.

Due to time constraints, items such as side reins, 'lungie bungee', Chambon and Pessoa training aids were assessed only briefly, provoking discussion on whether these training aids are meritorious or detrimental. Scientific appraisal of these instruments will feature in future scientific research.

These aids often focus on fixing the head position of the horse during exercise and the relevance of this training strategy was questioned and evaluated during the conference. Indeed, the real merit of the aids display was subsequently highlighted during a riveting display of how to incorporate the science of equine learning theory (how horses learn) into the proper training of the horse.

Jody Hartestone, New Zealand champion Grand Prix dressage rider and exponent of the learning theory approach, gave a short exhibition on the bene-

fits of this scientific approach to training horses. Delegates were in no doubt as to the benefits of the scientific approach when she initially demonstrated the basics, and subsequently returned following only 20 minutes training to ride the horse with a much improved self carriage.

Dr David Marlin delivered an intriguing paper on the challenges faced by equestrians in terms of the balance between equine performance and welfare.

Marlin explained how the training regimes of elite human athletes differed completely to that used with equine athletes. Marlin stated that much improvement in terms of welfare and lesser injury to the horse would result with a more scientific approach to training and performance in the horse.

There were other interesting papers dealing with equine learning, nutrition, genetics, physiology, behaviour, health and disease.

Toward the end of day three, Dr Barbara Murphy from UCD gave a stimulating lecture on equine chrono-biology and the challenges faced by equine athletes competing in different time zones.

All ISES Dublin 2008 delegates learned a great deal. The role of science toward improving equestrianism is becoming ever more apparent.