Equine Practice Into Science

Horses, Humans, and life in the 21st Century: new challenges, new opportunities.

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Horses have been a part of human life for millennia.

- They have been:
 - food,
 - part of the production of food,
 - athlete
 - industrial and transportation helpmate
 - therapist, physical activity facilitator and companion.

Horses still fill all those roles somewhere in the world,

In the developed world their role is in the process of adapting to meet the needs of increasingly urbanised life in the 21st Century.

Across history, horses have taken up roles which are produced by the state of human life.

Changing economies, changing societies and technological change have also changed the predominant roles held by horses in human life.

The process of social and economic change can be seen as a process of "creative destruction" where the old is replaced by the new.

Where society goes, so goes the role of horses.

Horses in the 21st Century

 Throughout history, the potential of the close relationship possible between humans and horses means that they have been companions, and the focus of leisure interests.

Now, however, the *leisure sector* (including fitness, competition, outdoor recreation, tourism, companion animals, etc.) takes a new role in contemporary society and the economy.

Leisure activities are highly significant generators of wealth, and people are willing to pay significantly for them, partly because their working and domestic situations generate a need for the things they provide.

What might be some of the new challenges this presents?

 The vast majority of horses are kept for leisure purposes covering many different activities.
 Each activity (jumping, hacking, trekking, etc.)
 has unique health and fitness challenges.

new challenges?

 Land economy has a direct impact on equine housing with a wide range of options, from "friestalling" to classical indoor single stall options.

 Poor economic times impacts horse ownership with 'abandoned horses' becoming a significant issue.

new challenges?

 Rising prosperity and animal insurance policies affects the demand for higher order veterinary services.

 Increased demands for better nutrition, better medical intervention, better welfare drive the equine knowledge-sector, and its implementation

new challenges?

 Globalisation and international movement present epidemiological challenges in terms of infectious diseases.

 Mobility challenges isolated gene lines through out-breeding.

 'Fashion' (as much as utility) drives breeding decisions.

Society throws up new conditions for animals. New science addresses some of those challenges.

Science, in dialogue with society, focuses on new phenomena, new challenges.

examples

- Equine Aging
- The changing nature of Horse Work

Equine Aging

- With better nutrition, better veterinary support, horses live longer.
- With more horses living longer, prevalence of age-related diseases will increase.
 - Special nutritional regimes
 - Chronic illness
 - Skeletal and structural issues arise
 - Genetic pre-dispositions expressed.
- Just as increased life span has affected human medicine, so too it will affect the equine veterinary sciences.

Horse Work in the 21st Century

"Arbeidshest" = a horse which pulls heavy objects, skilfully.

In 21st Century, *Arbeidshest* represent a very small percentage of European horses.

The vast majority of horses in Europe serve in the service sector. They provide humans with:

- physical exercise,
- access to nature,
- companionship,
- self-growth,
- education,
- sport and competition.

The human economy considers these as economic sectors, and humans 'work' to provide these services.

Why do we not see horses this way?

 Extensive medical research into the health implications of service sector work in humans suggest that the work conditions create a special set of occupational health hazards.

 Most of these are based around the stress generated by what is called "emotional labour". Recent research into stereotypies, gastric response to stress in dressage horses, and other similar topics suggest that there may be lessons to be learned from scientific advances in human epidemiology which is driving new science in equine health.

 "Equine Practices" change as human societies and values change.

 Changing Equine Practices generate new questions for equine scientists to pursue.

 Yet, our ability to understand changing equine practices at the societal level is challenged by our inability to gather good scientific data. The better we understand what humans do with their horses, the better we can understand the scientific challenges these behaviours represent. Science and Society have affected each other ever since there has been science.

 Science opens new horizons, contributing to new opportunities in Society.

 Society, in its ever-changing configurations, creates new opportunities for Scientific Research. Together, we generate new paradigms

 The better we understand each other, the better the scientific innovation we can generate.

Thank you

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