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SYMPOSIUM ON EQUINE BEHAVIOUR

SYNOPSIS OF AN ADDRESS BY SIR WILLIAM WEIPERS, DIRECTOR OF VETERINARY
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From the beginning of time, people interested in nature have studied what was called "natural history" including the reaction of animals to their environment, to various stimuli, and to each other; but it has only recently been elevated to the level of a scientific study, and now includes the study of ethology. In a world dominated by "progressive" societies which have advanced so far in the scientific and technical field, there is a sad lack of development in the science of living together as communities, and even if the study of ethology in animals were not justified in its own right, there would still be an overwhelming need for comparative studies to understand patterns of behaviour in man.

The factors that produce the action of communities appear to be vastly different from those that cause actions in individuals in family groups and in the relationship of one man to another. A study of the variation of behaviour patterns could be important in understanding human reactions to certain forces.

I was agreeable to giving this address for two reasons. Firstly, I wanted to welcome the Society to hold its conference here and promote its subject in its own right and, secondly, I am convinced that the subject of ethology is also very important from the point of view of comparative studies in man and the higher animals. It may throw some light on the mainsprings of behaviour in communities of man, and so help us to take whatever action may be necessary in order to improve present human relationships, which with modern technology of vast dimensions could, if uncontrolled, destroy the civilized world.

Some Observations on the Behaviour of the Horse in Pain

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Pain has been defined as the localized sensation of discomfort resulting from stimulation of specialized nerve endings.

The horse manifests pain in varying ways, depending on the site and severity of pain and the temperament of the animal. The presence of, or the ability to demonstrate pain will obviously play a very important part in clinical diagnosis.

General signs of pain include raised pulse and respiratory rate, muscular tremors, sweating and a general impression of uneasiness, although all of these signs need not necessarily be present at the same time.

The facial expression is quite characteristic in many cases. There is a fixed stare, the eyes tend to be puckered slightly, the ears held slightly back, nostrils dilated and the animal generally presents a "worried" expression. The head is often turned around to look at one flank. In abdominal pain in the horse various abnormalities of posture may be noted, such as backing into a corner or standing with the head pushed up against a wall. The animal may constantly lie down and get up again at short intervals. This is often preceded by a period of scraping the bedding with the fore feet while pivoting round on the hind legs.

When recumbent the nostrils may be dilated, the eyes tend to roll, the neck and head are often extended and the animal groans.

On occasion, a dorsal recumbent position with all four legs in the air is adopted and may be maintained for periods of up to 15 minutes.

More violent manifestations, in which the animal literally throws himself down, rolls, walks into fixed objects and generally seems oblivious to his surroundings, are indicative of pain of a severe nature.

Painful lesions of the skeletal system generally result in the animal adopting a position or modifying movement in such a way as to produce the least discomfort.

Observations of these variations from normality play an important part in diagnosis, in that they are an aid to localizing the site of pain.

Marked loss of condition is a common sequelae to constant pain over a prolonged period.

The Sexual and Social Behaviour of the Connemara Pony

By L. Collery, Veterinary College of Ireland, Dublin

The modern Connemara pony is an improved type of pony which has been indigenous, for an unrecorded period of time in the West of Ireland, where they probably formed an isolated part of the original European equine stock. The breed has been improved by introduction of Irish Draught, Thoroughbred and Arab blood. The latter was probably the largest and most important infusion. Conformation, pace and performance have undoubtedly been improved, and docility and hardiness appear to have been retained.

Socially and sexually, the Connemara shows no important divergence from other pony breeds whose activities have been recorded in the British Isles. At free range, the stallion takes considerable care of his herd of brood mares, but

makes little attempt to retain his daughters. In fact, he seems to repel his own fillies actively, although if they remain on hand when they come in heat, he will serve them.

The tendency seems to be to establish a herd of seven or eight mares and their foals. Colts, of course, split off from the herd when about 1-2 years old, and the fillies tend to follow them if allowed. Provided that these colts keep at a reasonable distance from the parent herd, the stallion does not molest them. On the home farm, where they are periodically confined, the stallion will not tolerate colts or even fillies or geldings beyond about a year old. Once progeny have been removed for a few weeks, he will not have them back.

The stallion mates at will. He sometimes makes several passes, sometimes with penetration of the mare, before there is full intromission and ejaculation. He has been observed to serve a mare again after an interval.

Perinatal behaviour is unexceptional. Placentas have several times been found on the pasture and it seems unlikely that mares attempt to eat them. Even with well-filled udders mares sometimes avoid the foal suckling for the first 24 hours. Some hours after birth foals are observed to bite at, or in the direction of, the anus. Presumably this gesture is directed at the meconium.

Mechanism The stallion displays considerable interest in recent droppings, sometimes urinates on them and spreads them out by pawing at them.

Pecking order is evident amongst the mares, but does not seem to be consistently related to colour, age or time in the herd.

Abnormal Perinatal Behaviour in the Thoroughbred Horse

By P. D. Rossdale, Newmarket

Diagnosis in veterinary medicine is based upon observations of the manner in which the behavioural patterns differ from those exhibited by normal subjects. The newborn foal adapts to an advanced level of activity within a period which is short relative to many other species, and the behavioural patterns which it exhibits during the period of adaptation are comparatively stereotyped. Because the status of any newborn mammal is affected by its previous experience of foetal development and birth, the behavioural patterns of the mother form an important anamnesis in the life of each individual neonate. Marked deviations of maternal behavioural patterns are not common amongst thoroughbred mares. Those that occur are primarily concerned with a failure to establish the normal epimeletic behaviour. Minor aberrations include the act of foaling during daylight hours, first stage signs which are not followed by those of second stage, delivery of the foal in the standing position, and rising to the feet immediately after delivery from the normal recumbent position. It is considered that many deviations are the result of the methods of management of the parturient mares including the habit of confining them to boxes in the presence of attendants.

Further study is required on the effects of management of foaling mares and also on the mechanisms involved in the establishment of the mother-foal bond.

The normal behavioural patterns of the newborn foal are well recognized in clinical practice and previous studies have been reported. Departures from the normal are frequently used in veterinary practice as pathognomic evidence of the presence of a variety of conditions and disease processes. The extent to which this is justified is questioned on the ground that many signs are common to differing entities. Some of the components of the behavioural patterns are discussed.

The foal's behavioural patterns may be disturbed as a result of the individual suffering from foetal distress or chemical and traumatic experiences during the birth process, as well as by infections with both viral and bacterial micro-organisms. The "barker" syndrome, or as it is preferred, "convulsive and allied syndromes" are highlighted in the paper as being of exceptional interest with regard to disturbances in the behavioural patterns. These include clonic convulsions, champing of the jaws, loss of suck reflex, intense high-pitched whinnying sounds and interference with care-seeking behaviour. A summary of behavioural patterns exhibited by foals suffering from this type of condition is presented.

BOOKS RECEIVED

Veterinary Encyclopaedia (Diagnosis and Treatment), Vols 1-4
Edited by Kjeld Warnberg, English editor E. A. McPherson
Copenhagen: Medical Book Company
Price £34 per set of 4 vols.

Current Problems in Leptospirosis Research
Geneva: WHO Technical Report
Price 4s.

A Bibliography of Farm Buildings Research. Supplement for 1966.
London: Agricultural Research Council
Also obtainable from HMSO
Price 20s.