

The Royal Smithfield Show

*Andrew Edgson, M.R.C.V.S.
Wokingham, England

The Royal Smithfield Show is unique in many ways. Apart from being one of the longest established shows in the world, it is held in the United Kingdom's largest exhibition centre, Earls Court, within a few minutes travel from the centre of the vast capital city of London. The Carcass Exhibition, an integral part of the show, is one of the largest held anywhere, and together with the agricultural machinery exhibits, live cattle, sheep and pig exhibits, it represents an accurate and comprehensive cross-section of agriculture in the British Isles. As a fat-stock show, it combines the interests of farmers, breeders, butchers, machinery manufacturers and, of course, the consumer members of the public. It is not surprising therefore, that in the United Kingdom it is called "the Agricultural event of the Year." It has enjoyed royal patronage since 1960 and has therefore members of the Royal Family as visitors, as well as Ministers of the Crown and national government.

An agricultural show is a highlight of the agricultural industry's year in any country. The Royal Smithfield Show, which is held in London each December, is no exception and, indeed, it is the main highlight, together with the Royal Show in July in

**Dr. Edgson is the Chief Veterinary Officer of the Royal Smithfield Show. He is in practice in Wokingham and is a past-president of the British Cattle Veterinary Association. Dr. Edgson recently received a Sir Winston Churchill Fellowship for a study tour in the United States.*

Warwickshire, of the British Agricultural Industry. It attracts not only many of the citizens of London to its doors but some of the finest breeders of beef cattle, sheep and pigs throughout the world. It is not only a show of animals but, today, a show of the latest industrial machinery which is used in agriculture in all its aspects. Accordingly, the standards of both exhibitors and stock are extremely high and for some years since 1963, it has been my privilege to ensure that the health and the presentation of the stock is as high as it has been in past years. The problems of today can not in any way compare with those of the first show which was held in Wootton's Livery Stables in the Dolphin Yard adjacent to Smithfield Market in London on 17th December, 1798. From the time of this first show until today, the Royal Smithfield Show has gathered strength and has reflected the changes which have taken place within the agricultural industry and amongst the breeders of livestock in the United Kingdom. It has, in addition to being a fatstock show, had a major influence on the agricultural policies of the breeders, farmers and, indeed, the nation itself.

The aims of the show have not altered over the centuries. As far back as 1800 the then president, the Duke of Bedford, addressing the members of the club at their annual dinner, said, "Without doubt there are two things we should most solicitously avoid; first, most certainly not to



Preliminary judging on the first day of the show at Earls Court, London. The balcony is about 500 feet wide, extends around the building and main hall. Here the sheep and pig lines are located, complete with their own judging rings and veterinary hospitals, industrial stands, etc.

associate to raise prices. . . . Secondly, we ought to pursue no measure which would have even the appearance of raising prices. The only true object of the farmer is to profit, not by high prices, but by *great products*. The increase of quantity, not price, should ever be his aim." He laid stress on the necessity of not doing the slightest injury to the public, but on the contrary, the doing of a great and decided good to them, and the same is true in 1975. "This," he continued, "we have in our power, and I trust we shall show it in the effects of our institution; for it will be of essential service to prove what breeds of cattle they are which give most food for man, from given quantities of food for animals. This is an object worthy of any society, and this object, I trust, will be effected by the unremitting zeal, enlightened views, and active exertions of this Society."

As will be seen from the then president's remarks, the aims of the Royal Smithfield Club, an integral part of the Royal Smithfield Show and one of the chief organisers, was that the standard of food from meat animals, which was to be presented to the public, should be of the highest. Even in those days, the importance of economic worth was well appreciated. If these remarks were true of the early part of the 1800's, then these remarks are even more true today, where a large percentage of the world is existing on a sub-nutritional standard so far as protein intake is concerned.

What exactly then do the duties of a veterinarian at such a show entail? Undoubtedly of paramount importance is the maintenance of health and the welfare of the animals during the period of the show, so that the best of animals are shown in peak condition. However, almost as important, is the careful and adequate examination of the animals prior to their entry into the show, in order to ensure firstly, that the animals which are coming forward and which will be subsequently exhibited at the show are, in fact, the animals which they are claimed to be by the exhibitor. "Faking" or substitution are constant hazards at any show where high prize money and prestige are at stake. These procedures are carried out by stewards appointed by the Royal Smithfield Club. So far as the dental inspection to ascertain the ages of the cattle are concerned, these are all checked by my team of veterinarians skilled in this work and myself. The Smithfield Dentition Rules have been in operation now for some 150 years and recent research work shows that these are still accurate when interpreted in this country today. The documentation of all animals is done by the exhibitors and these are checked at the entrance gates against the catalogue descriptions of the animals concerned. The importance of this examination can not be over-emphasised; it is obviously intended that any show should consist of healthy animals and, therefore, it is of supreme importance that only healthy animals are allowed to enter. When we have any animals which are of doubtful health, documentation, or of doubtful age, then these are placed in a holding area, which is adjacent to the entrances, but outside the actual

show exhibition hall itself. Here, further investigational procedures can be carried out before the animals are officially allowed to enter the show itself. These examinations are carried out on the Friday and Saturday prior to the show opening on the following Monday and, in all, approximately 1,600 animals are examined and catalogued. The species which we deal with are cattle, sheep and pigs; the cattle coming in by a separate entrance on the ground floor, to the sheep and pigs entering by the basement gate.

From the onset, the standard of health and fitness of animals which are allowed to enter has been set at an extremely high standard; this is a decision which has never been regretted. Once one allows animals with even minor defects to enter, then one opens the door to exhibitors trying to present animals with minor defects or, indeed, with actual sub-clinical disease states. It is also of vital importance that animals are fit and healthy before they are allowed to enter the exhibition hall, as they have to be housed often in close contact with each other within the exhibition for eight days and nights and, obviously, the presence of any infectious or contagious disease under these conditions could be of very grave concern to all.

For the last three years, the Royal Smithfield Show has been a fully accredited show; that means that all animals entering the show are from brucella-free herds. The detailed clinical examinations which are made on arrival are intended to preclude the following categories: disease such as ringworm, pediculosis, orf and any contagious systemic condition and, at the same time, to ascertain in cattle that their dentition is correct for their stated age classes. In addition, examinations are made in all species for adequate castration, and imperfectly castrated animals, or those which are in doubt, are excluded from the show. Also, any suspicion of pregnancy in a female animal would render it unsuitable for the show. In addition, "faking" in all its forms is looked for but, fortunately, rarely seen.

To carry out these examinations I have seven fully-qualified veterinary surgeons who have work experience in cattle, sheep and pigs, assisting me and, in addition, we also employ six final-year students from the Royal Veterinary College of London who assist with the checking of the documentation and also in the clerical work involved. A veterinarian of the Ministry of Agriculture, Fisheries and Food is also on hand, in case we should come across any cases of suspected notifiable diseases (e.g. foot and mouth disease, swine vesicular disease). The examinations take place in well-lit and specially-constructed areas with holding pens and holding areas so that suspect animals can be withheld from the show until their deficiencies or imperfect documentation have been decided upon. One of the features of this show is that the exhibition organisers are 100% cooperative and have produced all the required facilities. In my opinion, it is quite useless to try to examine animals either by bad light or in unworkable conditions, thereby reducing the value of the examination because it can be only partly completed. The examin-

ing veterinary officers complete their work by the Saturday afternoon of the week before the show opens to the public on the following Monday and I remain in residence within the exhibition building until the show closes on the following Friday night.

One of the features of the Royal Smithfield Show is a group of classes of cattle and also sheep and pigs which are entered and come into the exhibition hall on the Friday and Saturday before the show opens and then these are weighed and judged on the hook before they are taken away from the show on the Sunday to be slaughtered and subsequently returned to the show on the Tuesday for exhibition on the hook. This perhaps is one of the most fascinating features of this show and it is possible to see animals not only on the hoof, to see them judged on the hoof and then to see these same animals in carcass form, on the hook. As a veterinarian this feature has, over the years, provided me with a very real education into the effects of breeding, feeding and husbandry on the end product which, after all, is the whole purpose of rearing animals for food. The influences of the cross breeding with exotics such as the Charolais, Simmental, Murray Grey, Chianina and others, is then very evident when these animals are judged on the hook by skilled experts of the meat trade.

The organisation of the show from the veterinary point of view is such that we have hospitals adjacent to the animal lines for each individual species. Also, by obtaining the full cooperation of the heating and ventilation engineer of the building at Earls Court, it is possible to maintain the ideal environment in the various areas of the individual species. This is of particular importance, so far as temperature and humidity are concerned, in keeping the animals healthy and in a good state for exhibition throughout the period of the show. This is particularly important where one has members of the public viewing the animals and, in addition, it is, in my view, one of the most important features of the show and one's duties to the stock entered.

In order that this correct environment should be maintained, daily meteorological forecasts are obtained from the Meteorological Office which will give us the forecast for outside air temperatures, the risk of fog and also the relative humidity. The team of final year Royal Veterinary College students are responsible, during the period of the show, for monitoring with specialised equipment such as the individual air temperatures and humidity in the areas of the animals' lines. These are ideally kept at a maximum of 60-65° F. for the cattle, 50-55° F. for the sheep and 60-65° F. for the pigs. In recent years with mild winters, we have often been working with an outside air temperature of 58-60° F. and, therefore, when one has a large number of people entering the exhibition, there is a very real risk that the temperature can rise quite dramatically. A gate of 15,000 people at any one time can push the air temperature inside up by at least 15° or so and it is important that, together with the heating and ven-

tilation experts in the building, a careful monitoring can help to keep these temperatures within ideal limits. These problems were not appreciated at the first show in 1963 and it was surprising how many cases of heat stress resulted, even though the outside air temperature was only a few degrees above freezing point. The major problems which one can meet in this type of show are those which occur in intensively fed and reared animals in outside conditions, except concentrated. Respiratory problems in the past have been of great significance, but these, thanks to the control of the air environment, have been reduced within past years very considerably. In addition, the method of cleaning out the exhibition area each day had to be altered, as the original method produced a large amount of dust which caused irritation to the animals' upper respiratory tracts and tended to initiate a coughing syndrome before the doors were opened to the public which then further aggravated the coughing cycle by their movement and increase of air temperatures. Strangely enough, this particular method of cleaning out has now been adopted for other shows, e.g. the motor show, as the dust reduction obtained by the new method has also ensured that the gleaming metalwork of the show vehicles does not get covered with a fine layer of dust. These points may seem unimportant to the average outsider, but they are of prime importance when it comes to keeping the animals healthy, which is, after all, the main function of any veterinarian at any agricultural show. Each show has its own particular problems and these only emerge when the show has gotten under way, but there are many problems which can be anticipated in advance. Prior to my becoming the chief veterinary officer for the Royal Smithfield Show, deaths had occurred in the past from a "fog fever-like" syndrome which had been aggravated, or produced, by bad smog-like conditions in the Earls Court area of London. It was decided that so far as the treatment of this acute respiratory syndrome was concerned, one of the most useful additions to therapy would be in the area of immediate oxygenation of the affected animal. Accordingly, before the first show which we did in 1963, research workers at



"Tain't acute pneumonia wi' our Tony—just the big night out 'e had in Lunnon after the Show!"

Bristol University Veterinary School were contacted and Dr. Barbara Weaver designed a mask which was suitable for cattle and sheep to give them oxygenated air under periods of stress. This mask, which is light, portable and easily disinfected, has now become a standard part of the equipment for the show. Whilst owing to our ability to anticipate the internal air environment more accurately than in the past, it is still a useful stand-by in cases of emergency. This mask was first used on the Sunday prior to the first show which we attended in 1963, and a Highland steer called "Whisky" was treated by this method to such good effect that he was able to be exhibited the next day and, not only be exhibited, but to win first prize in his class. This resulted in a large amount of publicity which, overall, has been of some value, not only to the show, but to our profession. By perfecting the design of administering equipment, it is now possible to give 14 litres a minute of oxygenated air by this method and the mask has proved itself time and time again in practice, being most acceptable and easily placed on any animal, even normal ones. The mask works on the "Venturi" principle, the animal receiving oxygenated air, as opposed to 100% oxygen.

In addition, a spin-off of this mask design for the Royal Smithfield Show has resulted in its use in other species, e.g. the horse, when it was used for the British team competing at the Mexico Olympics, where the high altitude was a problem.

The veterinary hospitals, which are adjacent to each individual species' lines, are equipped with pens for isolation and for rest and these hospitals are located in a cooler and quieter part of the individual animals' lines. So far as the cattle hospital is concerned, as the cattle lines are on the ground floor then the cattle hospitals, (two) are situated between the cattle lines and the entrance/exit for the cattle. The hospitals of all species are equipped with drugs for emergency and routine treatment, including oxygenating equipment and also with portable washing, cleansing and disinfecting facilities. Paper towels are used throughout and rubber gloves are available for use when examining animals manually per os or per rectum. The prime requirements for any hospital at any show are met (i.e., good light, a quiet atmosphere and adequate space). Disposable plastic syringes and needles are used throughout which obviates the need for sterilisation, although sterilising facilities are available in my office, which is adjacent to the bedroom used by me during the whole of the period of the show. These facilities are vital when any minor surgery is required or if any sterilising of additional equipment is required, but large supplies of sterile swabs and sterile equipment are taken with us, pre-autoclaved and pre-packed, for immediate use.

Any show produces its emergencies, and, over the years, we have had our problems. Some of these have been amusing, some not so amusing, but, in the main, the highly organised facilities which are available have been able to cope quite adequately. The 100% cooperation of security staff and those engaged in

running the building and the show have made life very much easier, and, indeed, it would be impossible to function efficiently as a veterinarian without the 100% cooperation of all concerned. One of the more amusing incidents which occurred some four years ago, was an animal, a South Devon steer, which escaped on the Friday before the show while being unloaded from the transport. It obviously intended to take a trip of its own around the big city of London and streaked off out of the gates of the main building of Earls Court and into the main street running adjacent to the exhibition buildings. For such eventualities, my vehicle is always parked in the area of the unloading of the animal transporters, and I was quickly out of the driveway into the great city of London looking for the lost steer. Unfortunately, it coincided with the midday rush hour and, in order to avoid the traffic jams, it was necessary to drive along the sidewalks, much to the surprise of the local pedestrians. On my way in the direction of which the animal was last seen, I picked up some four London "Bobbies" complete with their rather large and characteristically shaped helmets. These were policemen who, brought up in the town of course, were unused to handling animals in any way whatsoever, and probably the nearest that they had been to a steer was to see it in the movies. Having, with some degree of trepidation, managed to circumnavigate the block adjacent to the Earls Court building, the steer was seen to be about a quarter of a mile ahead of us, trying to decide whether to go back into the other side of Earls Court, or to turn right, which was into the entrance into a subway station (one of our underground stations). Fortunately, one of the security men at the entrance to Earls Court Exhibition Hall saw the animal racing down the road and, very bravely standing in front of the traffic, directed the beast back into the area of the exhibition. We followed in with the vehicle and one of the policemen said in a broad Cockney accent, "This is all right, guv, riding around chasing it, but what do we do when we catch up with it?" We were able to lasso the animal and tie it and tranquillise it prior to loading it again into its transport to be taken back to the right entrance to the exhibition. It subsequently entered the exhibition and gave no trouble at all during the whole of the period of its stay, having obviously enjoyed its trip around the streets of London.

Another amusing incident occurred when, on one occasion, I was visited in my office by four Spanish gentlemen who were very impressed by the quietness of the cattle being shown in the judging ring at the show. The standards of stockmanship are extraordinarily high and many of the heifers and steers, when being shown, will stand absolutely still with nobody holding the halter at the head end and the stockman, or exhibitor, often going to the rear end to groom, or comb, the tail, immediately prior to the animal being judged (see photograph). These Spaniards were particularly impressed with this and came to me to enquire what tranquilliser I used

before these animals were allowed to enter the ring, to obtain this degree of cooperation from them. It took me several minutes to convince them that these animals were not, in fact, tranquillised, but that they were seeing a very high standard of stockmanship and very well trained animals on exhibition. I enquired as to why they were wanting this information. They turned out to be a veterinarian and three breeders of fighting bulls from Spain and wanted to know the name of the tranquilliser which they thought was being used, so they could administer it to Spanish fighting bulls between their breeding farms and the bull ring itself. To this day, I am not certain that they were really convinced and that they did not go away with the suspicion that some wonder drug was used on all the show animals before judging commenced!

Tranquillisers have been used on very rare occasions only at the Royal Smithfield Show, and animals of which we are in any doubt with regard to their temperament are not allowed entry. It is quite conceivable that should an animal be allowed to enter under the effects of a tranquilliser, then it could well become fractious once more during the period of the show and a real risk to other animals, humans and members of the public. This is obviously to be avoided at all costs.

The Earls Court Exhibition Hall is in itself, quite a small city and is the largest exhibition building in the United Kingdom, being approximately equivalent to three times the size of the Cow Palace, San Francisco, is situated over two Underground stations, and is conveniently close to the centre of London and, this fact is, of course, one of the main attractions of this show. The nearness to the West End of London with all its theatres, cinemas, bars and the like, makes it not only an exhibition for farmers, but also for their wives and is the agricultural social event of the year. It is an interesting sidelight on the Royal Smithfield Show that the caterers of Earls Court say that the consumption of alcohol per head is higher at this show than at any other that they have there! One interesting feature about this consumption of alcohol is that as the veterinarian for the show, we reduce the humidity to counteract the effects of higher temperatures on the animals. It has been found that animals, over a period of years, can tolerate higher temperatures with less discomfort if the air has a low humidity. By the Thursday of the show, the air humidity is down to 40%, less than half that of normal outside air, and the caterers say that the consumption of beer increases considerably from about the Wednesday onwards. The cause being, of course, a much lower humidity air than outside.

As with any show, one of the most important factors is the ability to communicate, especially in such a large building, with individual species about a quarter of a mile from each other. The building is equipped with a bleep device whereby by calling a coded number the individual set, which is worn by key personnel, will bleep. This system of communication is ideal because, of course, it does not involve the

public address system. In my view, any show where veterinarians have to be called via the public address system should re-think their exercise. There is nothing worse than a veterinarian being called on two or three successive occasions with apparently no response, for what is probably a non-emergency anyway. By the time the public have heard the call three times, they have concluded that the veterinarian is either a) not there, b) asleep, or, c) drunk, and that the animal must by now be dead, or "in extremis." All of these eventualities are, of course, untrue and unreasonable, but the impression left is unfortunate, and avoidable.

The important subject of dentition and examining for dental changes which occur as an animal gets older and which can be used to identify an animal's physical age were referred to earlier. Over a period of years records were kept which showed that certain changes in certain groups of animals did not, in fact, occur. It was noted that a high percentage of these, approximately 27%, came from Scotland and that, of these, the milk teeth, or temporary incisors, were not replaced by permanent incisor teeth. In view of the changes of husbandry and management which have occurred since the Royal Smithfield Show first started and since the Smithfield Rules were first detailed, some 150 years ago, it was decided that it would be advantageous to do some research work on this subject, in order to ascertain the factors which might influence dental eruption. With intensive methods of husbandry and with exotic strains of animals introduced into the country and altering patterns of breeding, it was thought that these factors may well alter these Rules and render them unsuitable for use as reliable methods of dentally aging animals. Accordingly, the Royal Smithfield Club were recommended to appoint a graduate veterinarian to study this problem in depth. Mr. A. Andrews* was appointed, and he completed, in 1974, a three-year post-graduate scholarship sponsored by the Royal Smithfield Club to investigate these areas of knowledge. His results show that, in the main, the Royal Smithfield Club Rules, although of very long standing, are accurate today. In fact, only one small alteration is required in these Rules to make them as effective as they were 150 years ago. These results are particularly interesting in view of the fact that genetic type, use of feed stuffs and different systems of husbandry would have altered the dental conformation of cattle.

This illustrates well that the Royal Smithfield Show is really only one part of the activities of the Royal Smithfield Club which, over the centuries, has done much to encourage and further the quality of meat production in the United Kingdom. The Duke of Bedford, 1800 president, would have been well satisfied that the aims of the Royal Smithfield Club, as he detailed them then, are still being carried out today, and even more so than then.

*See "The Use of Dentition to Determine Age in British Cattle," by A. H. Andrews elsewhere in this issue.