Getting Educated at the Zoo

Nancy Heneson

In this issue we present three papers that deal with the subject of the zoo. Although the focal concern of each paper is different and the positions of the authors range from whole-hearted support of the institution to frank skepticism, all express a belief in the potential educational value of zoos. This editorial, however, has a different premise. It is not meant to criticize the other papers, but rather to raise questions from another point of view.

"Educational value" has a fine, humanistic ring to it; as a principle it would seem inviolable. Yet when the means to this admirable end involve the kind of exploitation inherent in the exhibiting of wild animals in confinement, one begins to wonder just what sort of education is being provided, and further, whether even the most idealistic rendition of the educational benefits of zoos can silence the larger ethical questions.

The first question, what sort of education is being provided?, has no definitive answer. One cannot crawl inside the mind of every visitor to every zoo. Thus the answers tend to be prescriptive rather than descriptive (but see Ludwig, this issue), e.g.: Seeing live animals in the zoo should (will) increase one's awareness and appreciation of other life forms, enhance one's respect for wildlife, encourage an interest in and commitment to conservation and provide a vital connection with "Nature" in an ever more sterile technological society. There can be no doubt of the nobility and importance of these aims, and it would seem that a major part of the effort to upgrade the facilities and change the image of zoos has been directed toward making this type of educational experience more accessible. A person who sees an ocelot pacing in a bare, tiled cage will probably come away with a different impression of the animal than a person who sees, or tries to see, the ocelot slinking behind some vegetation in a naturalistic enclosure. Similarly, a sign outside a cage that informs the public that the animal within is a member of an endangered species adds a dimension of education that is missing from a sign whose entire message is "hooved stock."

However, too often the needs of the animals are subordinated to, or even confused with, the esthetic sensibilities of the public, and the result may be simply the erection of a country-club jail where Attica once stood. At a cost of \$2.9 million, the National Zoo in Washington, D.C. replaced small, barred cages with a new Great Ape House—glass enclosures, artificial tree trunks of concrete with branches of fiberglass, heated, easy-to-clean epoxy grit floors, and plenty of greenery in the viewing area only. Minus the gorillas and orangutans, the place looks like your average solar house in Marin County. Gorillas, unlike orangs, do not brachiate, and spend much of their time in the wild foraging among the vegetation of the tropical rainforest. For them, the "trees" seem to serve the same purpose as a mink stole thrown over the shoulders of a 1930s starlet posing for a publicity shot—they enhance the total effect. They are also much nicer for people to look at than a swinging tire.

There is no dearth of educational aids in this exhibit: display panels discussing habitat, geographical distribution, evolution, social and feeding behavior in captivity and in the wild, breeding and rearing of infants in captivity, and smaller panels with biographies of the individual inmates. However, most people come to look at the animals, to walk right up to the two-way glass and experience whatever it is they

experience when face-to-face (or face-to-back) with an animal in the zoo. And at what expense to the animal?

It is possible to display animals in settings more suited to their needs than the one described above (Hancocks, 1980). However, even if nearly optimal conditions for the achievement of educational goals could be reached, one can still question whether the value of education justifies the existence of zoos. How can respect for wildlife be instilled through an institution that exploits the object of purported respect? It is just possible that the ultimate educational message transmitted by a zoo, of whatever caliber, is that it is all right to subject animals to the often fatal stress of removal from the wild, all right to confine them, and all right to make sacrifices (the real meaning, not the scientist's euphemism) of them in the hope (or is it rationalization?) that contact with them through bars, glass, or even directly will raise the quality of life and the consciousness of human beings.

The fact that zoos exist is in itself an education. How the animals fit in, as can be seen from this editorial and the three papers to follow, is a matter of opinion.

Reference

Hancocks, D. (1980) Bringing nature into the zoo: inexpensive solutions for zoo environments, *Int J Stud Anim Prob* 1(3):170-177.

Productivity and Farm Animal Welfare

Michael W. Fox

In the search for and debate over objective indices of farm animal welfare, productivity is regarded by many animal scientists and others in the livestock industry as the most reliable measure of an animal's overall well-being and adaptability. On the surface, this would seem to be so, as productivity — in terms of growth rate, milk yield, feed-conversion and egg production — can be easily quantified. However, there are serious flaws in this assumption.

An increase in productivity may not be correlated with improved welfare or overall well-being. It may be attributable to genetic selection, higher protein intake, increased photoperiod, or a number of other husbandry and management variables.

A decrease in productivity does not necessarily correlate with a decline in welfare standards or overall well-being. Some husbandry systems are less efficient and their productivity lower because the animals are fed more roughage, for example, or are of a less productive genetic strain. A reduction in calcium or sodium or a decrease in illumination will dramatically depress egg production, while overall welfare is not jeopardized.

High productivity may actually jeopardize an animal's overall welfare, as exemplified by the so-called production-related diseases (Sainsbury & Sainsbury, 1979) of high-yielding dairy cows, as well as fast-growing pigs and broilers.

Antibiotics, growth stimulants, and other drugs may mask health- and welfare-related problems and lead to spurious correlations between welfare and production.

It is as risky to assume that a high production index is indicative of adequate welfare as it is to assume that low productivity is a sign of ill treatment. For example, store-feeding of beef cattle (in which cattle are kept at a low level of nutrition during the winter so that they just maintain their weight and are in good condition to make high rates of gain from grazing the following spring and summer) essentially mimics the natural seasonal cycle of reduced gain in winter, and as Raymond (1980) emphasizes, it is doubtful that there is any evidence that such cattle are under poor welfare conditions during maintenance winter feeding.

Taken alone, productivity cannot be regarded as a reliable indicator of animal welfare. Assessment of animal welfare entails an analysis of many factors, including health status, disease incidence, longevity, reproductive performance, physiological and behavioral indices as well as production records. This is the complexity that makes the science of animal welfare a challenging interdisciplinary subject.

References

Raymond, W.F. (1980) The Laying Hen and Its Environment. R. Moss, ed., Martinus Nijhoff, The Hague, Netherlands, p. 321.

Sainsbury, D. and Sainsbury, P. (1979) Livestock Health and Housing. Bailliere and Tindall, London, UK.

Animals in Film and Television

D.B. Wilkins

Animals are entertaining. This undoubted fact has been exploited by human beings for centuries and to the commercial advantage of many people. The ways in which we have exploited both the natural and unnatural behavior of animals have varied from the straightforward exhibition of an animal in a zoo to the perversity of dog-fighting, in which animals are allowed to fight until one or other is killed or badly injured. Entertainment implies both amusement and enjoyment, and it is incredible to realize that even within our so-called advanced Western civilization there still are people who can gain enjoyment from either directly torturing and killing animals or by witnessing animals inflict pain and death upon each other. North America and most countries in Europe have rightly condemned and outlawed bearbaiting, cock-fighting, and dog-fighting. There is no doubt, though, that these last two still have their followers and that organized events take place. The vast majority of people are appalled when they read stories of illegal dog-fights taking place, but is there any real difference in principle between that and bull-fighting in Spain, fox-hunting in Europe or the use of the cinch strap on horses in rodeos in North America? Each of these is a form of entertainment or sport which depends to some degree on the infliction of pain and suffering on animals.

One justification for "sporting activities" such as hare-coursing or dog-fighting is that the animals are behaving naturally. This must be a distortion of the truth as a

D.B. Wilkins Editorial

fight between male dogs in the natural environment seldom ends in the death of the vanquished. Greyhounds and other similar breeds will always chase hares and will frequently kill them, but hare-coursing as a sport relies on the chase and the kill to take place before spectators. This requires an artificial staging of the event; therefore the natural factors that would control such happenings in the wild are no longer influential.

Other activities that involve animals suffering in some form or other are excused or justified by those people involved on the grounds that they are traditional. Recent advances in our ethological knowledge and an increasing public awareness of the humane issues involved have meant that one of the only arguments left in favor of a circus is that it is a traditional form of entertainment. Most hunting of animals is based on our ancestors' method of obtaining food even though the end result these days is no longer necessary as a source of nutrition.

People have always had a fascination for large, "exotic" types of animals and as a result many zoos were set up all over Europe and North America. For many years there was a great deal of money to be made from exhibiting animals, and very little regard was paid to their welfare.

With the advent of cinema and television we have come to appreciate these animals in their own environment. Some modern zoos have attempted, therefore, to reproduce a type of natural surrounding for the larger species of animal, but the compromise between providing an animal with its natural environment and still allowing it to be seen by the public is not easy to attain, and there has always been a tendency to err on the side of the public. This tendency to favor the viewing public rather than the animals has resulted in concern about the way in which animals are exploited for films and television. These are modern problems, and they come under two distinct headings.

The first is a moral one and concerns the effect of animal suffering, whether real or simulated, on the viewing public. This subject is of considerable concern to the medical profession, sociologists and also politicians because it is now accepted that violence toward humans depicted on the film or television screen can be reflected by violence in real life. Does the same consequence follow the showing of scenes depicting violence against animals? Recent studies have shown that children appear to be more disturbed by a scene showing physical damage to an animal than to a human. Apart from the psychological disturbance to a child or adult of witnessing violence toward animals, the other direct consequence could be to encourage certain people to copy what they see presented in front of them in the form of entertainment. This is not to say that any scene involving animal suffering should be automatically censored; it must depend on the way in which it is presented and the conclusions that can be drawn, either consciously or subconsciously. Although it is perhaps an oversimplification, one could follow the previously accepted approach to crime, namely that you can show a person robbing a bank, but you have to show that person being caught before the end of the film.

A film that sets out to depict the horrors of game-poaching in Africa and includes scenes where animals are killed and maimed by poachers is morally defensible on the grounds that it is designed to stimulate public outrage against poaching. Is it equally defensible, however, for the film-maker to hire poachers and then arrange for them to kill animals, in front of previously set-up cameras, in order for the film to be made? I do not believe so although some would argue that this was a borderline case.

The example above brings me to the second problem which concerns the manner in which animals are manipulated in order that scenes can be created. The use of properly trained animals and modern filming techniques—clever editing, slow motion, models, etc.—should permit a film-maker to simulate almost every conceivable type of incident. In spite of this animals are frequently misused, and the main reasons are ignorance and expediency. (Within the context of this discussion cruelty can be defined as the infliction of pain or distress on an animal for the purposes of a film. In addition, I believe that it is also unacceptable to place an animal in a situation where pain or distress is likely to be caused.)

Several recent films released in the U.S. and Europe demonstrate both the good and the bad use of animals. "Heaven's Gate" has attracted considerable publicity over allegations that horses were killed or injured in the re-creation of certain battle scenes. The film also included a realistic cock-fight. There is no doubt that the misuse of horses, in particular, was commonplace a few years ago, but the public is now less likely to tolerate such happenings, and public criticism is bad box office. For this reason alone, I believe the majority of film-makers are prepared to be extremely careful in the way in which animals are utilized. Nevertheless, it can be difficult to assess the acceptability of a particular scene. Individual welfarists and veterinarians sometimes hold contrasting opinions.

The film "Every Which Way You Can," produced and directed by Clint Eastwood, contains a scene which exemplifies the difficulties. This film received an "acceptable" rating from the American Humane Association, but its final version contained a scene in which a ferret and a snake were placed in a glass tank and allowed to fight. The reason put forward for justifying this scene was that neither animal suffered any physical damage as a result of the fight because of the precautions that were taken. The snake had been "defanged" and "milked" of its poison and in addition, its lips had been sutured together. This prevented the snake killing or damaging the ferret although there was, in my opinion, no justification for taking such steps simply to create a scene for a film. The snake, even though it is a reptile, is entitled to as much consideration as any other animal, especially when one is concerned only with entertainment. The ferret did not receive any similar attention and although unlike the mongoose, it did not have the necessary instinct or ability to kill the snake, in the course of the fight it succeeded in biting the snake.

Fortunately, in the United Kingdom there exists legislation which is little understood abroad but which prohibits the exhibition or distribution of films in the production of which suffering may have been caused to animals, wherever in the world the film was shot.

The relevant paragraph of this Act stipulates the following: "1.(1) No person shall exhibit to the public, or supply to any person for public exhibition (whether by him or by another person), any cinematograph film (whether produced in Great Britain or elsewhere) if in connection with the production of the film any scene represented in the film was organized or directed in such a way as to involve the cruel infliction of pain or terror on any animal or the cruel goading of any animal to fury."

It is therefore clear that it is not necessary under this law to have inflicted actual injury on the animal and, therefore, the scene described above had to be deleted before the film was licensed for general release in the U.K. Although this may be described as "shutting the stable door after the horse has bolted," it still provides another weapon in the fight to achieve humane treatment of animals used in films.

The use of drugs, particularly of the narcotic or tranquillizer type has become more widespread. In particular, they are being used as a means of producing a sedate or tranquil animal that is then possible to manipulate for a particular film scene. Some wild or aggressive animals can be filmed in close proximity to an actor or actress with the use of such drugs. Once again we are faced with the problem of what is permissible in the name of entertainment, and I believe that some members of the veterinary profession are at fault here. In my opinion, no drug should ever be used on an animal unless it is directly to the benefit of that animal. In other words, to administer a drug, even a tranquillizer which may have a wide safety margin, to an animal to enable it to be filmed is not justified. It is regrettable that many veterinarians will not only approve of this but also willingly become involved in such filming by helping to administer the drug and care for the animal. I say regrettable, because in the eyes of the producer or director of that film there would appear to be no moral or practical objection to such a use of animals if a veterinary surgeon was prepared to give it his or her approval.

Television has recently taken over from the cinema as the most popular form of visual entertainment and carries with it possibly even greater problems over the use of animals. There are very few live television programs, but where they do exist there is sometimes a temptation to introduce animals into the studio and to use them during the course of the program. With smaller budgets and less room for expenditure on animals, many television producers will attempt to use animals obtained from the general public rather than from animal experts. The result is that an untrained, inexperienced and quite frightened animal is placed in the strange surrounding of a television studio for the first time in its life. The resulting mental anguish, if not physical damage, must be quite extreme. It must surely be possible when filming a television program to anticipate this problem and either to use animals that are conditioned for indoor work, or within their own natural surroundings.

It is inevitable that the telling of stories or the portrayal of real life drama as depicted within the cinema or the medium of television must use animals from time to time. Because the use of animals is a means to an end and frequently only a small part of those means, there is a tendency for the manner in which these animals are used to be less than correct. Regrettably, many owners or handlers like to bask in the reflected glory when an individual animal is pushed into the spotlight in some way. Such personal ambition will frequently be allowed to override what otherwise would be an owner's or handler's normal compassion and regard for the animal in their charge. All these facts mean that there is tremendous responsibility on the part of the directors and producers of both television and film productions. Early consultation when a production is being planned with those who are going to provide the animals, those who are going to work with the animals, and experts in animal welfare, must take place.