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THE WHY AND HOW OF ANIMAL SHOWS

Why an Animal Show?

The appeal of animals in general is practically universal. Man has lived close to his domestic animals for thousands of years. The mutual attraction which brought man and animals together is virtually instinctive for both parties. Wild animals were of interest to primitive man as sources of food and clothing and sometimes as sources of danger. At any rate, man very early became an animal watcher. People of all ages and both sexes like to watch animals; particularly they like to watch them do things. When possible, people like to touch, feel, and feed animals.

Although animal shows and exhibits are often thought of simply as recreational, diverting, entertaining, there are many other built-in benefits which may be even more important. For example, park visitors may

- learn that animals need not be feared for supernatural or other reasons;
- 2) learn respect for the capabilities of animals to adapt and survive;
- develop empathy for animals;
- 4) come to understand the predatory animals and the relation of animals to each other, each init's own ecological niche;
- 5) learn techniques of training animals using positive rewards rather than punishment; thereby perhaps he may learn something about handling his own domestic or pet animals;
- 6) be entertained while being so subtly educated; Park employees may also absorb the benefits of 1) through 5) above, plus they may
- 7) learn the technology of operant conditioning;

- 8) learn new electrical, electronic, and electromechanical technology through learning to handle and care for the equipment often used in a modern animal exhibit;
- 9) develop their senses of aesthetics (set design, show presentation, etc.);
- 10) develop a sense of pride and responsibility about work, especially concerning the care and handling of the animals put in their trust;
- 11) receive exposure to scientific methods.

In addition, certain benefits can accrue nationwide, in

- 1) increased sophistication of the general population;
- 2) the exposure to new scientific technology, particularly in the behavioral sciences; for example, the operant conditioning methods pioneered by ABE in the development of animal shows have also been successfully used, by ABE and others¹, in the education of the mentally retarded, in classroom teaching, in handling of problem children and the mentally ill; (See below, page 8)
- 3) providing socially acceptable and beneficial entertainment and diversion for the population;
- potential use of the knowledge gained for animal control where it is necessary;
- 5) the development of a new educated class of skilled behavior technicians whose knowledge of reinforcement techniques and animal care may be useful in other applications.

Franks, Cyril M. Behavior Therapy; Appraisal and Status. New York; McGraw-Hill, 1969.

Breland, Marian. Teaching by positive reinforcement. In Teaching the Mentally Retarded, Gerard Bensberg, (Ed.) Atlanta; Southern Regional Education Board, 1965.

The History of the Animal Show.

Animals are seen as parts of public festivals and religious ceremonies in the artwork left by many ancient peoples -- in Egypt, ancient Greece, in Aztec and Mayan art. They appeared in parades, worship services and rituals.

The Roman arena perhaps first exploited animal entertainers on a large scale. Here the animals often appeared as contestants, with each other and with humans, in races and sometimes bloody battles.

The traveling animal show probably began with the gypsies and other nomadic peoples in the Orient and in the Europe of the Middle Ages, Gradually some of these small troupes of tamed, performing animals -- dancing bears, horses, dogs, cats, monkeys, etc. -- were incorporated with demonstrations of human skills in what were to become the great circuses of modern Europe and America.

The zoological gardens were also developing in Europe at the same time, specializing simply in the collection and exhibition of (to the Europeans) unusual animals. Unlike the zoo animals, the circus animals did things.

However, the number of species that could be trained were very few, and the behaviors that could be attained were quite limited. Training was very much an art, and the "secrets" were passed on from generation to generation.

What is the Animal Show Like Today?

The new behavioral technology, based on operant conditioning and pioneered by ABE since 1947, has made many new developments possible. We can develop more elaborate chains of behavior, we can train animals much faster and much more economically, we can train more species than ever before. Because it is based on science rather than a mystical art, the new behavioral technology makes it possible to train trainers. The "secrets" can readily be passed on to anyone of normal intelligence who is willing to learn them.

In the most common form of animal show or exhibit today, the animals are most often trained to perform "humanoid" behaviors — perhaps in the tradition of the circus acts. For example, the dolphins, perhaps the most popular to today's performing animals, play basketball and baseball, jump hurdles, make music in various ways, "dance", wear hats, and so on. Chickens, ducks, and rabbits may take part in card games, "count", and play miniature pianos.

The important thing is not what the animals <u>seem</u> to be doing, but what they are doing in fact. The different animals play the piano in different ways, but basically, because they are earning their food in this fashion, each is engaging in some portion of it's normal food-getting behavior -- the chicken pecks, the duck "dabbles", and the rabbit scratches. This facet, while recognized, has been little explored. In every instance of a trained behavior, the trainer makes use of a bit of the animal's natural behavior which makes the animal's life possible.

What is the Future of the Animal Show?

What can we do now? Of course, we can train and exhibit the natural behaviors of more exotic animals. For any country, there are animals which are foreign, and animals which are native to the area. All can be of interest to the population of that country. It is possible to bring under humane control the natural behavior of any animal which will live in captivity and in the process educate the public and maintain the animal in better physical condition than would be the case if it were simply sitting idle.

Certainly using native (and particularly domesticated) animals of a given country offers many advantages. There is a strong human interest in these animals. Using common domesticated animals can offer quite a financial saving. They are readily available and cheap. A technology of their husbandry has already been developed and paid for. They have no unknown impact on the environment. No paper work is involved in acquiring them.

Certainly the modern animal show is based on the use of common domesticated animals or on the relatively few well studied wild animals. The next step may well be to begin work with new and more unusual species.

If one wants to explore possibilities of the more unusual animals, it is necessary to study and solve the husbandry and health problems. After these problems have been dealt with for a given species, such an animal can readily be introduced into a training program.

The animal show of the future may be much more along the lines of a multa-media presentation. One is exposed to the sights and sounds of the animal natural behavior patterns. At the same time the visitor by tape or slides or some other audio-visual means is listening to an explanation of what is going on. Thus a person sees the behavior, hears the natural sound patterns, if any, and simultaneously receives an explanation of what is happening, why it is happening, and how it is taking place.

The "How" of the Animal Show: Style and Scope. The style of an animal presentation refers largely to its method. There are a number of possibilities. In the following, we have used the terms "show" and "exhibit", sometimes almost interchangeably. Usually, when we speak of a "show", we are referring to a stage or amphitheatre presentation handled by a human master of ceremonies, guide, or handler. These human participants can readily be trained by ABE. When we speak of an "exhibit", we often refer to animals performing naturalistic or humanoid behaviors under more-or-less automated conditions. The equipment is constructed so as to give the animalit's signals to perform. The equipment monitors what the animal does and rewards it automatically when it has finished the behavior sequence. Sometimes a quide will perform part of these duties -- for example, he may push a button or open a door to release an animal. These exhibits may often be operated by a timer, push-button, or coin slot mechanisms.

While <u>scope</u> is somewhat difficult to define, it refers to the general size and complexity of an exhibit. A show may be classified as small, medium, or large.

A small educated animal exhibit or show generally features one to four small animals. It is meant for presentation to a small group. A small show may be conveniently presented indoors as well as outdoors. Portability is often a feature of a small show. It may be taken to schools, to television stations for special publicity, to special gatherings or festivities. Audience size may vary from just a few at a time, to as many as 300 or more, depending on the method of presentation. Because of the close proximity of the audience to the animals and to the human handler, it is easy to form the intimate atmosphere that is conducive to audience participation -- having the audience ask questions, having the handler ask questions of the audience, etc. It is perhaps thus ideally suited to educational themes and practices. A small animal exhibit is generally designed to last from perhaps only a few minutes up to as long as 30 minutes.

A <u>medium-sized</u> animal exhibit would have at least 8 and up to 20 or more small animals or perhaps fewer large animals. Such an exhibit is most suited for a small to medium-sized outdoor amphitheatre or a medium to large indoor facility. Audiences of up to 900 are easily accommodated.

A <u>large</u> animal exhibit could include one to several medium to large-sized animals. If it is an amphitheatre production, the audience could number 2,000 to several times that number. If the exhibit features animals conditioned to perform under natural or near-natural conditions, then the drive-through or walk-through approach -- the audience going to the animal -- is most practical. A large animal exhibit would need at least

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a large stage and in the naturalistic setting could require many hundreds of square meters or more. To our knowledge there exists in the world today no truly behaviorally conditioned large animal exhibits other than the marine mammal shows.

It should be stressed that a complete animal facility might include several of each type of exhibit. Nature trails could include several automated small exhibits featuring single small animals performing more or less continuously. Interspersed on the trail could be a few medium-sized completely automated exhibits which would be programmed to operate periodically, depending on traffic. Elsewhere in the park could be medium and large amphitheatre "shows."

Moving about the park could be a number of mobile small animal exhibits (e.g., an "organ grinder" with a monkey, a snake-lizard-turtle petting zoo on wheels, a bunny photographer, etc.) This type of exhibit is, of course, also ideal for transporting to schools, remote areas, etc.

All the exhibits would educate and entertain; some would add to in-park revenues.

NOTE: Other Benefits.

A decided fringe benefit of the training of animals is the training of people. Training an animal involves a very simple form of communication between trainer and trainee. ABE very early recognized that this communication link could be a very powerful tool in working with the emotionally disturbed and

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mentally retarded groups with whom ordinary verbal communication does not always work. ABE also discovered that trained animals could be used in the classroom to instruct technicians, doctors, nurses, teachers, ward attendants and other health care personnel in teaching the mentally handicapped. Great savings in time and money can be affected if institutionalized children can be taught to care for themselves. In addition, those institutionalized can sometimes live a more productive, happier life.

We would suggest that a cooperative program be developed between the park and local health and educational institutions. Such a program can do much to improve greatly the life of some citizens of the country involved.