3. the prohibition of painful surgical procedures without the use of a properly administered anesthesia; and

4. provisions for a licensing system for all farms. Such system shall include, but shall not be limited to, the following requirements:
   i. all farms shall be inspected prior to the issuance of a license.
   ii. farms shall thereafter be inspected at least once a year.
   iii. minimum requirements shall be provided to insure a healthy life for every farm animal. These requirements shall include, but not be limited to:
      a. proper space allowances;
      b. proper nutrition;
      c. proper care and treatment of animals; and
      d. proper medical care.
   f. The Board may enter into contract with any person, firm, corporation or association to handle things necessary or convenient in carrying out the functions, powers and duties of the Bureau. However, it shall not enter into a contract with any such firm or person who has a financial or commercial interest in any activity to be regulated or prohibited by this Act.

106. Director

The [Governor] [President], with the advice and consent of the shall appoint a Director from a panel of not less than three names submitted by the Board. No person shall be appointed Director who has a financial or commercial interest in any activity to be regulated or prohibited by this Act.

107. Powers and Duties of Director

The Director shall be the executive and administrative head of the Bureau. In addition, the Director shall:

a. issue licenses in accordance with the procedures promulgated by the Board;

b. inspect and report to the Board on the treatment of animals in commercial farming;

c. investigate all complaints and allegations of unfair treatment of animals;

d. issue in writing, without prior hearing, a cease and desist order to any person if the Commission has reason to believe that that person is causing, engaging in, or maintaining any condition or activity which, in the Director's judgment, will result in or is likely to result in irreversible or irreparable damage to an animal or its environment, and it appears prejudicial to the interests of the [State] [United States] to delay action until an opportunity for a hearing can be provided. The order shall direct such person to discontinue, abate or alleviate such condition, activity, or violation. A hearing shall be provided with days to allow the person to show that each condition, activity or violation does not exist; and

e. file a petition for custody of an animal whenever it becomes necessary to protect the animal from neglect or cruelty. The court shall order the animal committed to the Bureau if it finds that the welfare of the animal so requires. Animals committed to the Bureau may be sold or euthanized, or kept in the custody of the Bureau, as the Director determines.

Comment:

Subsection d was adopted in part from the Model State Animal Protection Act proposed by the Committee for Humane Legislation. That subsection, along with subsection e, are essential to protect abused animals from the delays of the judicial process. It is anticipated that the cease and desist order rather than the petition for custody will be used almost exclusively. Nevertheless, the power to petition for custody is included as an alternative remedy when cease and desist orders are inadequate.
poor management than outright abuse or neglect.

Edwin Banks (University of Illinois): Behavioral research to answer questions about animal welfare. Domestic animals have been selectively bred and genetically manipulated to the point where natural selection no longer determines their behavioral adaptedness to an environment. It is therefore necessary to gather ethological profiles (ethograms) of farm animals to discover whether common intensive management practices conform to species-specific behavioral needs. Once the ethogram is established and recognized, various factors can be manipulated to improve animal welfare. These include physical adjustment of rearing systems, social restructuring (e.g., stocking rate, sex/age ratios) and genetic modifications through selective breeding. The spectre of legislation looms over producers unless they begin to pay more attention to and cooperate with applied ethologists in the design of rearing and housing systems and the management of large numbers of animals under intensive conditions.

Thomas Hartsock (University of Maryland): Ethological approach to farm animal behavior research. Despite the relatively recently modifying influences of selective breeding, the modern farm animal evolved in an environment quite different from the one in which it is now living. Behavior, which is sometimes labelled 'abnormal' may in fact be normal from an evolutionary point of view, but inappropriate due to the presentation of inappropriate stimuli by an unnatural environment. For example, early weaned (12 h) piglets sometimes choose to lie against a wall near a heat lamp rather than directly under the heat lamp. Far from being an aberrant avoidance of the heat source, this behavior is actually the piglet's attempt to make contact with an object in the environment as it would seek contact with the mother sow. Mistaken interpretations of farm animal behavior could be alleviated by the animal scientist, the veterinarian and the producer taking an ethological approach and familiarizing themselves with species-specific behavior patterns in both wild and artificial environments.

Stanley Curtis (University of Illinois): Status of farm animal behavioral research in North America. A survey was made of major agricultural journals and USDA information services to determine the extent and types of animal agriculture research devoted to behavior. The highest percentage of reported research dealt with feeding and reproduction, and the investigations tended to be confirmatory rather than novel. By contrast, the least frequent (7%) and most novel experiments and research projects were in the areas of social behavior and animal welfare. Dairy cattle and poultry were the primary animals studied.

Michael W. Fox (Institute for the Study of Animal Problems, Washington, DC): Discussant. Ethology is a powerful tool for assessing animal welfare, but it should not be the only method used. An integrated approach incorporating physiology, behavior and productivity is ideal. Whatever the approach, however, it should be emphasized that the abolition of suffering is not the goal of farm animal welfare research. The elimination of suffering could probably be achieved through the use of drugs and psychosurgery, but such measures can severely alter or even obliterate the essential nature of the animal. Instead, the needs, behavior, physical and social environment of the animal should be studied in order to create and implement management systems which maximize the animal’s opportunity to be itself. Enough welfare research has been done in the U.S. to set up minimal codes of practice similar to those established in the U.K. The livestock industry should be persuaded to support the formation of codes, if not for humane reasons, then out of the practical consideration that in the absence of voluntary codes, legislation will eventually be imposed on producers through the efforts of animal welfare advocates.

International Whaling Commission

The 32nd annual meeting of the International Whaling Commission (July 21-26, Brighton, England) could be characterized from the conservationists’ point of view as anything from a limited success to a major disaster. However, despite varying opinions on the degree of progress made at the meeting, conservationists agreed that the gains for whale protection fell far below their expectations. Many had been confident that the Commission would approve a total ban on commercial whaling. Instead, measures to institute either an immediate or a two year phased-in moratorium were defeated when they failed to obtain the necessary three quarters majority needed for adoption in the plenary session. Canada and South Africa, both nonwhaling nations, voted for the whaling bloc to prevent imposition of the moratorium.

Despite the failure of the moratorium vote, the overall quotas set for the 1981 whale kill were significantly lower than for the previous year, continuing a seven year trend. Next year, 13,851 whales are scheduled to die, compared to 15,656 this year and 45,673 in 1973.

Conservationists were also disappointed by the failure of the IWC to ban the taking of sperm whales. Both votes on an immediate moratorium and one for a one year phase-in, lost the majority by one, with Canada casting the deciding
ANNOUNCEMENTS

Felix Wankel Award

The 1979 Felix Wankel prize for research in animal protection (see Int J Stud Anim Prob 1(1):63-65, 1980), amounting to $11,500, has been awarded to Dr. Hilary Koprowski, Director of the Wistar Institute of Anatomy and Biology (Philadelphia, PA), for his work on the production of monoclonal antibodies in tissue culture.

Dr. Koprowski has had a distinguished career in medical research since leaving his native Poland in 1939. After spending four years in Brazil with the Rockefeller Foundation's Yellow Fever Research Service, he joined Lederle Laboratories, a division of American Cyanamid (Pearl River, NY) in 1944 and became one of the leading figures in the search for a polio vaccine. Dr. Koprowski has been with the Wistar Institute since 1957.

The production of monoclonal antibodies from somatic cell hybrids ("hybridomas," composed in this case of mouse myeloma cells and splenocytes of immunized mice) is a relatively new field which shows enormous potential for human carcinoma diagnosis and therapy. Antibodies produced naturally by an organism's immune system in response to an antigen have a wide range of binding specificities and affinities. Therefore, the use of antibody sera in diagnosis and in tests such as the radioimmunoassay are fraught with problems of non-specificity. Koprowski and his team recently studied 19 antibodies secreted by hybridomas and found that 15 were specific for the surface antigens of human colorectal carcinoma cells (Somatic Cell Genetics 5(6):957-972, 1979). Koprowski's work to the concept of alternatives lies not in the aims of the research, i.e., to find a way to study the antigenic structure of human tumor cells, but in the technique used to produce the monoclonal antibodies. Instead of producing vaccines and antibody sera in the whole animal by means of inoculation and immunization, antibodies can be cloned from a cell line maintained in tissue culture. Although live animals would still be used to start the cell lines, their overall numbers would be considerably reduced. According to the Felix Wankel prize judges, "The production of antibodies in cell culture represents a genuine alternative with possibilities that we cannot even envision at present."

North American Applied Animal Ethology Newsletter

A quarterly newsletter to promote the exchange of ideas among people interested in applied animal ethology and related fields is being initiated. We are soliciting items for the first and subsequent issues relevant to agricultural, companion and zoo animals (including game farms) that may be of interest to your colleagues, e.g., announcements and brief summaries of meetings, research/employment opportunities, letters to the editor.

The results of a survey of applied animal ethology/behavior programs in North America will be a supplement to the first issue. Surveys mailed to all animal, dairy, poultry and veterinary science departments and colleges in North America will also be a supplement to the first issue. Surveys have been mailed by Dr. Ray Stricklin (University of Maryland) to all animal, dairy, poultry and veterinary science departments and colleges in North America.

Subscriptions cost $2.00 (U.S.); make checks payable to "AAENL." Address correspondence to Dr. Ted Friend, Editor, Applied Animal Ethology Newsletter, Animal Science Department, Texas A&M University, College Station, TX 77843, USA.