Knowledge of the range of normal behavior within our domesticated farm livestock systems of extensive husbandry. The Committee also believed that if the above were not in themselves be regarded as objectionable and may even often benefit the animals.

Careful observation is a basic and most important tool of our discipline. Knowledge of the range of normal behavior within our domesticated farm livestock species has many gaps. I would like to think that all of us who visit farms on a regular basis or who undertake projects with livestock could record basic aspects of behavior so that the bank of information is increased, thereby improving the quality of the advice that can be given.

In making these evaluations let us not forget the recommendations of the Brumbell Committee which said quite categorically that animals should be provided with a husbandry system appropriate to their health and behavioral needs.

The Brumbell Committee also recognized that each system of husbandry has its own hazards which must be evaluated and in that statement they included systems of extensive husbandry. The Committee also believed that if the above principles were applied to intensive husbandry methods, the use of such methods should not in themselves be regarded as objectionable and may even often benefit the animals.

More information allows more meaningful advice to be given to Ministers through the Farm Animal Welfare Advisory Committee (FAWAC), which may involve a recommendation to amend parts of the Welfare Codes of Practice. More information allows our colleagues who are daily concerned with this work on the farm to be better briefed. More information allows consideration to be given to setting up and monitoring husbandry systems which can be designed to more closely match the most up-to-date knowledge of the behavioral needs of the animals concerned yet still provide satisfactory returns to the producer.

In the State Veterinary Service, with the cooperation of colleagues in other services of ADAS, we try to monitor all relevant experimental and development projects both inside and outside the Ministry in order to ensure compliance with the welfare codes of practice and any other statutory requirements, and consider it, with minor adjustments to the experiment or development protocol, subsequent results could be improved insofar as welfare content is concerned. The SVS also endeavors to ensure that the results of experimental and development projects which have or could have welfare implications are passed rapidly to all our veterinary and husbandry colleagues, to seek out and support new development projects and to act as a liaison between the FAWAC and research organizations.

We are continuously considering how we can more efficiently retrieve and disseminate information. Currently we are looking at ways and means of obtaining more information on the various husbandry systems for veal production, and have set up a small observational study on the transport of pigs.
one sees it in historical perspective. This is necessary because the present image has its roots firmly implanted in the distant past.

For our purposes here I would like to briefly summarize some of the more important events of the past which have contributed to the present posture of NSMR. In doing so, however, I would like to emphasize certain realities usually not accepted by NSMR.

In the late 1860's there appeared in Great Britain an upsurge of public sentiment toward a variety of highly questionable animal research practices. This movement began gaining momentum about 1870 and snowballed into passage of the British Cruelty to Animals Act in 1876. Although many blatant acts of animal cruelty in laboratories were exposed, the scientific community persisted in its defensive posture until passage of the British Act became a moral imperative in the public view (Ryan, 1963; Dennis, 1966).

A second, much smaller, snowball of public resentment occurred in the U.S. in the late 1890's when Senator Jacob H. Gallinger attempted for three consecutive years to have Congress enact a similar law. Through a magnificent defensive campaign, reaching from Washington to grass roots America, William Henry Welch almost single-handedly defeated Senator Gallinger and his following (Flexner and Flexner, 1941).

A third and major snowball of public resentment surfaced in the U.S. in the early 1960's, and despite the defensive efforts of NSMR, led to passage of our Animal Welfare Act, its subsequent amendment, and the addition of several new rules through the Animal Welfare Act's built-in mechanism for bureaucratic lawmaking. Fortunately, and again despite NSMR's defensive efforts, the standards promulgated thus far under the Animal Welfare Act have had a very positive effect—beneficial to good science, to animals and to scientists.

The point I wish to emphasize is that NSMR, like all of its predecessors representing the scientific community, has consistently maintained a defensive posture while claiming that all practices of animal use and care within the biomedical community have been "illegitimate." In my judgment, this has been a major tactical error because abuses of freedoms to use animals in research too frequently have been and continue to be common knowledge (e.g., Science, Editorial, 1976). NSMR's complete unwillingness to face up to these realities and to respond positively to the public's legitimate concerns has led to the inevitable loss of credibility and steady decline in influence.

To compound the problem further, NSMR has rigidly followed the erroneous concept that all who speak out for the humane interests of animals are arch enemies of medical progress. Such persons have been uniformly labeled by NSMR as members of the radical fringe—"antivivisectionists" or "sentimentalists" (Visscher, 1972). This too has been a major tactical error because it means that in reality, NSMR has served as a major force in polarizing the various factions representing antagonists and protagonists of animal research. In the process, many of the most ardent would-be supporters of NSMR have been alienated. The net result has been an organization with a posture generally viewed as counter-productive, and as a consequence, operating in an ever-diminishing sphere of friends and influence.

At this point I would like to speak to the question of the future of NSMR. Although many scientists and other colleagues are beginning to ask whether the organization has a future at all, I am convinced that because of the enormous pressures facing animal research today, from an avalanche of bureaucratic red tape, from inflation and tightening financial constraints, and from other forces, effective leadership from an organization such as NSMR is needed in the U.S. now as never before. I hasten to add, however, that the organization's future effectiveness will depend on whether or not it is willing to undergo dramatic change. What changes are needed? What should be the elements of NSMR's program for the future?

1. The NSMR should develop an offensive program, a positive rather than a negative posture.
   a) New and imaginative leadership is desperately needed, and may be the key ingredient. That leadership must forget about the old clichés and archaic arguments of the past and begin communicating effectively with all parties concerned.
   b) The positive program would seek to make NSMR a rallying point for all animal research interests, a major center for disseminating information and coordinating efforts of all groups. At the same time, however, NSMR must never assume that it has a role as the only spokesman for medical research.
   c) The positive program must at all costs avoid territorialism, factionalism and criticism of other groups. As an example here, I would suggest that the newly-formed Research Animal Alliance (RAA) should have been received with outstretched arms, and the services of NSMR offered in the interest of close cooperation.
   d) The positive program seeks to identify problems ahead of time and to solve them before they undergo the snowball effect.

2. The NSMR should diligently seek to eliminate the reasons for criticisms of animal research.
   a) The first step is to admit that there are serious problems.
   b) All research institutions should be encouraged to seek AAALAC accreditation, or otherwise subject their facilities and laboratory animal programs to careful scrutiny by professionals competent to judge their quality, using the National Institutes of Health Guide for the Care and Use of Laboratory Animals as a basic standard.
   c) In particular, the NIH should be encouraged to improve its intramural animal care facilities and bring them uniformly up to standards of the Guide. It borders on being a national disgrace that NIH expects AAALAC accreditation of extramural programs but does not take this matter seriously for its in-house operations.
   d) An effort should be made to upgrade substandard facilities throughout the country. Although the Animal Resources Branch of NIH has a program of this type, its funding has always been inadequate. NSMR should wage a campaign to double the appropriation for these purposes at NIH.
   e) A serious effort should be made to increase the number of trained professionals to deliver quality animal care. Again, the appropria-
3. The NSMR must develop mechanisms for effectiveness at the grass roots level.

For many years it has seemed to me that NSMR has cast itself in a very difficult, if not impossible role. The reality of the situation is that a central, office-based organization such as NSMR cannot defend freedoms to use animals in research. It must be done on a day-to-day basis in every institution where animals are used. In the past, too many institutions have been willing to pay their dues to NSMR and forget about any further responsibility for quality animal care. NSMR must actively develop or assist in developing local, positive programs for defending its causes. NSMR should encourage scientists at all levels to become involved in humane societies at the local, state, and national level. The truth of the matter is that extremists, like the "2%" in any organization, are a small minority. Many of their well meaning but radical positions are the result of ignorance. NSMR should accept this reality and diligently seek to work with all parties. Above all else, an effort should be made to encourage constructive dialogue rather than polarization of groups.

4. The NSMR must continue and expand its lobbying activities.

The need for these activities at the local, state and national levels continues to proliferate. Therefore, the demands on NSMR in this area will probably increase. Its success in the many new areas under consideration currently, such as transportation guidelines and all kinds of environmental standards, will probably depend increasingly on its ability to use specialists in numerous fields, and to work closely with groups such as the Institute of Laboratory Animal Resources, the Research Animal Alliance and others.

In closing, I would like to quote from the final paragraph which appeared in Dr. Maurice Visscher's article entitled "The Newer Antivivisectionists": "Eternal vigilance is the price, not only of personal liberty, but of progress in biological science..." (Visscher, 1972).

I agree with Dr. Visscher. Vigilance is important. But, I am absolutely convinced that if NSMR is going to be effective in the future, it must do much more than maintain a vigilant, defensive posture. As Dr. Visscher points out in his most recent article on animal rights and alternative methods (Visscher, 1979), "...