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# SOME ETHICAL CONSIDERATIONS CONCERNING THE USE OF LIVE ANIMALS IN BIOLOGY EXPERIMENTS

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## Introduction

As biology teachers we are continually faced with decisions regarding the use of experiments in order to identify, investigate, clarify or illustrate a particular concept or concepts. If an experiment is to be performed we frequently have to decide whether to use live animals, preserved animal specimens, preserved animal organs, fresh animal organs (from, say, the butcher), tissue cultures, audio-visual simulations or even class members as the subjects. Many students, and indeed many teachers, have been reticent about their acceptance of experimenting with live, or freshly killed animals; frequently the issue is settled by reference to such work being in the interests of science or knowledge.

Human beings have a relation and a responsibility toward non-human forms of life about which serious questions have always been raised. Attempts to curtail and prevent unnecessary suffering of non-human beings in high school and college laboratories have, in the past, usually appealed to individual sensitivity, emotion, and insights; until recently there has been no serious attempt to develop a rationale for examining man's relation and responsibility toward non-human animals. In order that our consideration of non-human species receive a more thorough assessment, I believe that it is important that biology teachers become conversant with some of the ethical principles involved in the issue concerning the use of live animals in classroom experimentation.

## Ethical Considerations

For the past 2,500 years there have been a variety of ethical ideas regarding the nature of animals. Western society has predominantly taken the ethical position that animals are to be used for human purposes; this actually is consistent with the Judeo-Christian ethic where man is granted dominion over animals on the earth, as only humans have immortal souls. The influence of Darwinism has done little to change this attitude — in the moral sense, animals are considered radically inferior to human beings.

However, despite the lack of justifications and philosophy of ethical considerations towards non-human species, many organizations such as The Humane Society of the United States (cited in Orlans, 1977), The Animal Welfare Institute (1978) and The National Science Teachers Association (1978) do have guidelines for the care and treatment of laboratory animals, though little has been expressed about the animals' behavioral and social well-being.

The question which arises is: "Upon what bases do we make decisions regarding whether or not to use live animals for classroom experimentation when this experimentation involves the animal experiencing fear, pain, deprivation, close confinement or death."

Both as individuals and as biology teachers we have to decide whether the principles of equality should be applied to non-human beings (Singer, 1975). For example, it is now considered inappropriate to measure the equality of human beings simply in terms of their comparative intelligence; the appropriate measure is in terms of their rights to equal consideration regardless of intelligence, age, sex, color or race. Should we decide that non-human animals are to be given different consideration to humans as experimental animals because they are non-human? Any argument that bases species differences as a boundary for equal consideration is indefensible. There is no moral justification for saying that the interests of human beings deserve more weight than other animals; the argument of species difference is logically no different than the argument of racial difference. Singer (1975) suggests that the boundary for equal consideration should be extended further and/or an attempt made to select something that makes a significant moral difference between species.

In the past, arguments distinguishing man from other animals have included: man is the only rational animal; man is the only animal able to use a language; lower animals are violent and sex-possessed — "the beast within"; lower animals do not have the capacity to make free choices; lower animals do not take responsibility for their futures. Should these views be accepted, the corollary is that certain of these arguments also apply to certain human beings, including defective infants and senile persons. Normal cats, dogs and chimpanzees are superior to defective human beings, who come within the sphere of equality, when arguments are based on man being a rational animal, or man taking responsibility for his future. Should the boundary lines change to include defective human beings with lower animals?

The argument boils down to the point that animals' interests ought to be given the same weight as those of human beings, while not necessarily being equivalent in every instance. Any animal experimentation does involve a prejudice to use live, non-human animals, and while many experiments are often justified by pedagogical necessity not all animal experiments in one's classroom can be so justified.

From an ethical point of view, Singer (1975) presents two test questions which could be a helpful guideline to those deciding whether or not

to use live animals for experimentation in their biology teaching. (1) Is this experiment so important that I would be prepared to use human beings (defective infants or senile persons) rather than non-human animals? Does willingness to use animals stem from interest in the animals' welfare? (2) Are there alternative means of obtaining the same information? As an example, could the same objectives be met by using films or working with tissue cultures rather than live animals? Such questions would overcome species bias and would certainly help reduce the number of experiments where pain, deprivation or death are concerned.

### Conclusion

A considerable amount of literature (Orlans, 1968, 1970, 1972; Bryant, 1970; Roswell, 1973; and Secord and Rowsell, 1974), has been written about experimentation with live animals in schools and recent state laws are ensuring that the principles expounded by the humane societies and animal welfare societies are being followed. However, in order that our decisions to use live non-human species in biology experiments receive a more thorough assessment, I believe that it will be helpful for biology teachers to become conversant with related ethical principles. Some of the principles related to the use of live animals in classroom experimentation have been briefly mentioned here and are discussed in more detail by such authors as Singer (1975), Regan and Singer (1976), Clarke (1977), and Morris and Fox (1978).

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