

# Environment and ethics: an educational perspective

---

## Environment and ethics

---

N. Gough

### Abstract

The ethical dimensions of environmental study are considered with particular reference to environmental education. It is argued that moral considerations and value judgements are an inevitable component of any form of environmental investigation or education and the nature of environmental ethics is explored in this context. Methods for transmitting environmental ethics are considered critically and the article concludes by suggesting some alternative approaches to exploring environmental ethics in education.

### Introduction

The relationship between environment and ethics often was taken for granted during past stages of human history, particularly in pre-industrial societies in which the ties between people and their natural environment were more intimate. Studies of present-day agricultural and hunting societies may also provide evidence of a close relationship between environment and ethics but, in modern Western society, this relationship is by no means clear. The separation of environment and ethics has been helped by the prevalence of scientific paradigms in environmental study. Notions of scientific detachment and objectivity often appear to be antithetical to consideration of ethical questions, since the latter inevitably involve the acceptance of a human-centred perspective.

Education in the environmental sciences has perpetuated the separation of environment and ethics, as is illustrated by the following anecdote.

Several years ago, I showed a film about the mutton birds of Bass Strait to high school biology students. The film was a straightforward account of a CSIRO investigation into the decline of the mutton bird population, and included some rather gruesome scenes of the annual slaughter of nestlings by Tasmanians with a taste for roast mutton bird. However, the CSIRO study concluded that this annual slaughter was not the reason for the population reduction but, rather, was related to the decrease in available nest sites (mutton birds build their nestse on the ground) resulting from the increased use of the Bass Strait islands for grazing domestic stock.

After viewing the film, I asked my pupils to speculate on the motivation for the CSIRO's study: in other words, why should we be concerned by a decrease in the number of mutton birds? Most pupil's answers were variations on a familiar theme: the removal of mutton birds from the food web they occupy could have unpredictable effects and, perhaps, far-reaching consequences for man. Every reason for concern about mutton birds was reduced by the pupils to a concern for man's food supply. Finally, however, one pupil offered a different reason, although she had considerable difficulty in articulating it. The gist of her remarks was that, perhaps, a world with mutton birds might be a more "beautiful" place than a world without mutton birds and, further, perhaps there might be something "wrong" in allowing mutton birds to become extinct. Needless to say, her reasons were immediately challenged by other pupils on the grounds that a biology

Victoria College  
Rusden Campus  
Clayton Victoria 3168

class was no place for aesthetic or moral judgements (their words were somewhat different, but that was the thrust of their remarks). (Gough, 1979b).

Many teachers would share those pupils' views. Yet school biology, like environmental education (and, indeed, anything that is done in the name of education), is the product of human invention and purpose and, as such, owes its very existence to people holding certain moral principles and having made certain value judgements. This may seem to be stating the obvious, but many teachers — and perhaps especially those with academic backgrounds in the natural sciences — are reluctant to admit that certain *moral* judgements and *value* positions are basic to their work.

Emphasis on the terms 'moral' and 'value' is deliberate, because these words seem to have more negative connotations for many people than 'ethics'. We often accuse people of 'moralizing' or 'of making value judgements' when, in fact, we wish to *devalue* what they are saying.

There is no linguistic basis for distinguishing between ethical and moral. The *Oxford Concise Dictionary* defines an ethic as a 'set of moral principles', ethics are 'moral principles, rules of conduct', or 'the whole field of moral science', and ethical means 'relating to morals, treating of moral questions' or 'morally correct'.

### Moral dimensions of environmental study

Until relatively recently in human history, it would not have been necessary to point out that the study of mutton bird populations necessarily involves making moral judgements. Within the Aristotelean tradition which dominated European scholarship until the eighteenth century, no strong distinction was made between matters of fact and matters of value. The scholarly disciplines were conceived of as guides to "the attaining of our true good and happiness" (Samuel Johnson, quoted in McKeon, 1967: 182-3). However, in more recent times the sciences have been conceived educationally in terms which attempt to exclude moral principles and value judgements from consideration. Indeed, the so-called "exact" sciences have implicitly put a value on removing human values from their versions of rationality. On a philosophical level, the consequences of such approaches are succinctly captured by Harold Brown: "The attempt by logical empiricists to identify rationality with algorithmic computability is somewhat strange, since it deems rational only those human acts which could, in principle, be carried out without the presence of a human being" (1979: 148).

Quite apart from the limited view of rationality encouraged by recent conceptions of the natural sciences, it is also a truism that environmental problems — again, like most human problems — cannot be solved by reason alone. This is because

The sense in which rational judgements must be universally acceptable is weaker than the sense in which ethical judgements must be ... A consequence of this conclusion is that rational agents may rationally try to prevent each other doing what they admit the other is rationally justified in doing. (Singer, 1979:206).

There is nothing paradoxical about this. Two politicians competing for electors' votes will accept each other's conduct as rational, though each aims to thwart the other. Many of the current arguments in support of uranium mining, wood chipping and building hydro-electric power stations in wilderness zones are every bit as rational as arguments opposing them (and irrationality can also be found on both sides of the debates about such issues). Eventually, these issues can only be resolved by reference to moral principles — to human beliefs about what constitutes right and wrong behaviour.

Environmental education inevitably involves attempts by people with certain moral commitments to persuade others that those commitments should be more universally valued. Some of these commitments are fairly explicit and command a high degree of value consensus in the environmental education community: a concern for the quality of life and a commitment to the conservation of natural resources are frequently cited as examples.

The recent research traditions of the natural sciences provide another set of values about which there appears to be a degree of consensus among environmental educators, although these values tend to be held unconsciously (or simply taken for granted) rather than being explicit. Much environmental study accepts — or at least pays lip-service to — the ideal of scientific detachment. But, as Polanyi has observed:

In the exact sciences, this false ideal [of scientific detachment] is perhaps harmless, for it is in fact disregarded there by scientists. But ... it exercises a destructive influence in biology, psychology and sociology, and falsifies our whole outlook far beyond the domain of science. (Polanyi, 1958: vii).

One example of this 'destructive influence' is the distortion of our knowledge of ecological systems which results from much field research being conducted upon laboratory assumptions. This is because the assumptions upon which research paradigms involving sampling and inferential statistics rest become untenable in field situations. Indeed, it has been argued that the unit of study in ecological and ethological field research must be the case and not the sample and that therefore, ecologists and ethologists may be able to use and refine the case study methods currently used by historians and ethnographers. (Gough, 1979a).

The point to be made here is that any form of environmental education, whether it be a mass media campaign to reduce litter or a school science teacher's lesson on the water cycle, is predicated on certain value positions (although the values concerned may be more apparent in the former example than the latter). Thus, environmental education is, inevitably, a form of moral education: it is what we do, consciously or unconsciously, to affect people's thinking about issues of right and wrong, and to affect their behaviour in regard to interactions between humans and their environments. But morality has two related meanings. We use the term to describe the generally accepted code of conduct in a society (or within a sub-group of it), and within this conception of morality the process of moral education may broadly be described as the socialisation of the children, shaping them into a conforming member of society. But we also use the term "morality" to mean the pursuit of the good life, and that is by no means necessarily the same as following an accepted social code. The same term, therefore, implies both conformity to the prevailing social morality and also pursuit of an individual ideal. Moral education faces a dilemma in attempting to develop both kinds of morality, for social morality cannot be imposed in such a way as to prevent the possibility of forming personal ideals. Indeed, moral progress has often been made by individuals who have gone against the accepted morality of the day, and who have generally suffered for doing so.

The moral controversies which currently surround many environmental issues, such as uranium mining, seal hunting and the exploitation of wilderness, are symptomatic of this conflict between individual and social morality. Environmentalists are usually a moral minority pursuing their

ideals in defiance of the prevailing moral code. Both parties to such conflicts are, however, re-affirming the importance of education for social morality. Unless a society passes on to the next generation the values on which it is founded, it faces self-destruction. Many of these values are of the kind which are needed for maintaining the very fabric of society itself, such as honesty, fairness, and co-operation. There are other values which are more concerned with the particular kind of society we have or want, such as self-respect, privacy, independence and democracy. The environmental movement is one among many social pressure groups trying to educate people to accept that these values are not enough, that there are others which must also be passed on.

### The nature of environmental ethics

An individual's moral development involves the acquisition of personal ideals which interact with the value consensus of their society. As noted above, moral education is therefore — at least in part — a form of socialisation; it is education for social conformity. Conformity, in this sense, need not involve any loss of individuality: tolerance of diversity may be included in the values we share.

Environmental ethics demand an expansion of our moral horizons, because our behaviour towards the natural environment extends beyond mere social conformity and, indeed, requires an expansion of our notion of what "society" we are conforming with. For example, in *Animal Liberation*, Peter Singer speaks of extending "the basic principle of equality of consideration to members of other species" (1976:12). Singer contends that prejudice against members of other species is no less objectionable than prejudice about a person's race or sex. So far as moral education is concerned, it is important to note that Singer is not merely arguing for a change in individual ideals or for a change in social conduct; he is also arguing for developing a code of behaviour within a society that includes other species as well as humans.

It has been argued that environmental ethics are based on our knowledge of the origins and evolution of life (Gough, 1979b) and on the value we place on that knowledge. Our relationships with our surroundings extend along the dimensions of time, into the past and into the future, and so environmental education must always be concerned both with our ecology and our evolution. In this sense, an environmental ethic is dependent on the assumption that we will behave differently if we see ourselves and all life as parts of a natural evolutionary process. Kozlovsky sees such an ethic as "making a virtue of scientific materialism":

You are nothing but an interesting combination of earth's rocks, water and air; these and two billion years of evolutionary explorations, new trials, new combinations, new forms. Can you imagine the earth-awareness of a society wherein each child is taught that he, like all other forms of life, is a trial in the art of surviving and adapting? (1974:3).

To speak of people as "nothing" is, of course, an exaggeration, and seems not so much intended to belittle humans as to cut them down to size. Similar views are expressed by advocates of the wilderness experience, which is seen as a "corrective to our abounding pride in our own capability. We have the experience for a moment of being reduced in size to the real scale we inhabit on this earth." (Willi Unsoeld, quoted in Gussow, 1979:10).

This view of human life suggests that our notion of morality must incorporate a kind of environmental conformity, that is, people ought to be in an harmonious equilibrium relationship to the rest of the earth — living and non-living — which is to be included in one's image of the good life. Such an equilibrium suggests, for example, that each individual should be able to obtain for themselves the physical, chemical and biological necessities of life, but only the necessities. This is not only respectful of human life (by ensuring that all humans, both now and in the future, will have these necessities) but also respects the rest of the living and non-living world. Kozlovsky sees this principle as one which treats all of the earth's resources as "precious, to be carefully used and recycled, if used at all." (1974:104). Such moral principles would radically alter our behaviour because,

like the principles which arise from religious conviction, they demand that we think beyond the span of our own lives. Kozlovsky sees evidence of our failure to accept an environmental ethic in our modern funeral practices: “[One] manifestation of our refusal to accept ourselves as animals, ... is our nearly universal attempt to keep ourselves from rotting back to the soil that produced us.” (1974:107).

### Transmitting environmental ethics

The transmission of environmental ethics involves what one writer has called the 3 E's of moral education: exhortation, example and experience (Ryan, 1980). That is, we learn to be altruistic partly by being told that we ought to be altruistic by others, partly by seeing examples of altruism in practice, and partly by actually performing altruistic acts (and feeling virtuous when we do so). These 3 E's are involved, to a greater or lesser extent, in each of four alternatives for moral education outlined below.

Three approaches to moral education seem currently to be in vogue. These are usually described as the values clarification approach, the developmentalist approach and the cognitivist approach (Doyle, 1981: 138-9).

### Values clarification

Values clarification, as typified by the work of Raths (1966) and Simon (1972), has perhaps been the most popular approach to moral education in recent years, and has been strongly advocated as a part of environmental education (Stapp, 1974; Stapp and Cox, 1979). It involves the creation of situations in which children are given the opportunity to clarify their values, without any indication that some values might be more appropriate than others. Basically, values clarification is a series of games — some of which are very intriguing — which allow children to consciously express their values. These activities include voting on value issues, role playing value auctions, and so on. Ryan (1980) outlines four reasons for the popularity of values clarification with teachers:

- values clarification games are flexible in terms of time and opportunity — they can be used to fill in time or as sanity savers
- values clarification games are generally enjoyed by pupils
- conducting values clarification sessions requires no special training
- values clarification games allow teachers to deal with important and/or controversial moral issues without exposing their own values — they can appear to be neutral.

The chief criticism of the values clarification approach is suggested by the last point: it appears to promote moral relativity, that is, it promotes the view that all values are deserving of equal respect. Perhaps the most succinct criticism of values clarification is implied in the slogan: “Hitler clarified his values”.

### Developmentalist moral education

Developmentalist moral education has its roots in Paiget's work, although it has recently been popularized through the work of Kohlberg (1976). The approach is based on a theory of moral development which suggests that children pass through a number of stages in becoming moral beings. The exact number of stages varies from theorist to theorist, with Kohlberg suggesting six. Kohlberg's stage theory is reassuring in that the natural progression is up: a person at stage 3 cannot regress to stage 2. But Kohlberg's theory poses problems for educators because the stages have to be passed through in sequence and, furthermore, moral development from one stage to the next can only be accomplished by exposure to exhortations, examples or experiences associated with that next stage and not a higher one.

Again, criticism of Kohlberg's stage theory centres on its implicit moral relativity. It is a theory concerned with the structure of thinking rather than with the moral defensibility of thought and action. Children are helped through stages in the development of their system of moral judgements with no indication that some values and judgements may be better than others.

### Cognivist moral education

The Cognivist approach, popularised by Fraenkel (1973), involves the analysis and justification of values according to their consequences. Its purpose is to teach the cognitive skills required for ethical thinking and is characteristic of many undergraduate philosophy courses dealing with ethics. In this approach, although some indication is given that some values are preferable to others on the basis of their consequences, children are still left in the relativist situation where they hold those values which they judge on the basis of this analysis to be better than others.

### Moral education for a set of values

Each of the three approaches to moral education discussed above is valuable and, despite the competing claims of their advocates, there is no strong evidence that any one of them is any better than the other. All three approaches should be encouraged and all are applicable to environmental education. However, all three approaches are inadequate to the extent that they encourage moral relativity and that they tend to be used in educational settings as word games — moral issues are dealt with mainly in a talky kind of way.

A fourth approach to moral education, and the one which has the longest tradition, could be called the set of values approach. Advocates of the other three approaches are united in their agreement that this approach is wrong (Kohlberg refers to it disparagingly as the “bag of virtues” approach). The essence of this approach is that we consciously try to instil in children that set of values which we want to pass on. Furthermore, we use the full range of moral education methods to instil these values: exhortation, example and experience. That is, if we want to instil environmental ethics in children we do not merely talk about them but we also exemplify them by our own behaviour and give children experiences of behaviour consistent with these ethics.

This approach is as ancient as Aristotle. When Aristotle was asked, “How does a man become virtuous”, he did not say that a man should clarify his values, pass through stages of moral development or learn the skills of values analysis. Rather, Aristotle's answer was to the effect that a person becomes virtuous by performing virtuous acts (Ryan, 1980). For environmental education, the consequence of this approach is clear: we should attempt to provide students with opportunities to do things which contribute to the harmony of human interaction with this environment.

Critics of the set of values approach are usually concerned about the possibility that the approach may involve indoctrination. Such concern is warranted, but there is a kind of indoctrination that is an escapable part of our existence. Some aspects of socialisation can be labelled indoctrination and environmental educators should be alert to the possibility that their attempts to environmentalise students might be labelled in the same way.

Nevertheless, environmentalisation may be every bit as defensible as socialisation, and the possibility of indoctrination may therefore be regarded as an acceptable risk.

It should be noted that questions of indoctrination do not usually arise when there is already a widespread value consensus in a society. Thus, for example, in a traditionally Christian society the relationship of faith and morals is taken for granted: morality and religion are assumed to be inseparable. As noted in the introduction, the relationship between morality and environment has also been taken for granted in past stages of man's history, including relatively recent times:

Meditation on nature in the nineteenth century was a recognised avenue to the centre of being ... “Looking” became an act of devotion.

The nature experience was considered a crucial amenity for the moral man, and ... was readily accepted by society as a religious alternative ... the cultivation of the landscape experience (even by challenging it through risk and danger) was one of the key pre-occupations of the age. (Novak, 1980).

Novak is an art historian, and the evidence for her conclusions comes from American landscape paintings of the

nineteenth century and contemporary art critics: 'Critics admonished their readers to experience nature fully, since only the man practiced in reading nature's text could appreciate paintings dealing with that experience'. Novak persuasively argues that the powers of the great landscape artists did not simply arise from their formal talents as painters, but that they were reinforced by a social agreement about the meanings of art and landscape in an age where there still appeared to be a seamless, didactic relationship between nature and people. Nature has not lost its power to instruct, but people have increased their ability to distance themselves from it, in particular through the adoption of scientific paradigms which attempt to ignore moral perspectives in the study of environment.

Educating people to be more environmentally ethical means recapturing something of the relationship between people and nature that is expressed in the best landscape painting, nature poetry and prose. Environmental educators need to rediscover ways in which this relationship may be experienced which do not perpetuate the distinction between matters of fact and matters of value which characterises much modern science.

Fortunately, there are many modern poets, painters, songwriters, novelists and film makers who can assist in this task. For example, Arthur and Corinne Cantrill are in the forefront of Australian film makers, and their work in recent years has become increasingly involved in exploring the relationship between film form and landscape subject matter. Two of their recent films are particularly interesting. Both have Uluru (Ayers Rock) as their subject, both are of much the same length (about 75 minutes), both were filmed in summer, two years apart; but each is quite different from the other. The reason for this difference is best explained in their own words:

*At Uluru* (1976) is a film of clarity, simplicity and luminosity, made in a spirit of optimism and euphoria occasioned by this most wonderful of places at a time of unusual natural abundance. *The Second Journey (to Uluru)* (1981), filmed after the area had been badly burnt out, approaches this place with a burden of pessimism. Since our first visit we had come to know much more about Aboriginal claims to Uluru and the large-scale commercial developments planned there which will fundamentally change the nature of the place. The biggest problem is the feeling that we are helpless to alter the forces at work there, that we are witnessing a situation that has been repeated all over Australia. Nothing is spared from greed, not even the great natural shrine of Uluru. (1981-26-7).

The remarkable thing about these two films is that sentiments such as those expressed above are conveyed without narration, by the use of experimental techniques of colour separation and sophisticated techniques for amplifying natural sounds. These films do not present the conventional tourist's postcard images of Ayers Rock. Rather, they suggest the accretions of time at Uluru: the millions of years of geological changes; the interaction of the slow rock changes with the desert, the dust, the smoke, the damp, with insects, other animals and humanity.

Humour is another source of environmental insights. For example:

Open Heart University  
(Dedicated to BBC-TV Open University)

We've come a long way  
said the Cigarette Scientist  
as he destroyed a live rabbit  
to show how it worked  
He took its heart out  
plugged it into an electric pump  
that kept it beating for nearly two hours.  
I know rabbits who can keep their hearts  
beating for nearly seven years  
And look at the electricity they save.

(Spike Milligan, 1979)

Environmental educators are often directly responsible for the deaths of animals. Is destroying a live animal in order to show students how it worked morally justifiable? Many

students and teachers evade this question, and evade experiencing the moral dilemma posed by dissection by obtaining preserved specimens from biological supply companies. If dissection is morally justifiable, it may be preferable to keep live animals available for that purpose so that students can experience — and accept some personal responsibility for — the eventual killing of an animal to satisfy their curiosity or search for knowledge.

Moral issues in the human-environment relationship are at the heart of a recent Australian short film, *Winter's Harvest/Raccolto D'Inverno* (Brian McKenzie, 1980). The film is a documentary account of a community of Italian families, now living in Australia, who still practice Southern Italian provincial customs within the confines of Western consumer culture. The film shows these families collectively slaughtering and processing a pig into salamis and other meats for winter. The film ends on a note of foreboding: what these families are doing is illegal, and pressure from the meat industry portends an end to these people's traditionally based control over their own food.

The contrast between the traditional and industrial methods raises many ethical questions. When the Italians cut the pig's throat, its blood is carefully caught in buckets and used later in making sausages. In the abattoirs a great deal of blood is hosed down the drains. Observing the killing itself, and one's own reactions to it, may force us to ask ourselves if we would eat pork quite as often as we do if we had to kill the pig ourselves first. In New South Wales alone, about 100,000 pigs are reared intensively each year, most of them in sheds which are artificially ventilated, artificially illuminated and cement-floored. Their tails are cut off and their tusks are removed to prevent them chewing each other in boredom (Townend, 1981). Man's inhumanity to pigs and other farm animals — and Australia's conspicuous over-consumption of protein — may be a direct product of our moral detachment from the actual processes of transforming these animals into food.

## Conclusion

A prominent Australian environmental educator once remarked that "environmental education aims to produce awareness and does not hope to win issues." Thus, he added, "it is not a real achievement to stop whaling: the achievement would be to set up management of whales which would ensure their availability if and when we need them". (Strom, 1980).

Environmental education has many valid dimensions and does not only include the sort of consciousness raising, with its spurious appearance of moral neutrality, to which Strom refers. Many environmentalists believe that whaling is morally wrong and that moral arguments for preserving whales are of greater merit than arguments which relate to the possibility that people might need to exploit them in the future. But one's personal views on such issues are of less importance than recognising that moral persuasion, in one's attempts to win issues in environmental management, is a legitimate part of environmental education. For example, one does not have to agree with Singer's (1976) arguments for vegetarianism to agree that his attempts to persuade people that exploitation of other animals by humans is morally indefensible counts as environmental education.

Producing awareness is invariably selective. Judgements must be made about which information and which issues are to be put before students, and these judgements are moral in character. Environmental education cannot take place in a moral vacuum and, to the extent that environmental educators are committed to certain values, they will attempt to win issues. To obscure such values, which many scientific approaches to the study of environment encourage, is itself unethical.

## References

- Brown, Harold I., *Perception, Theory and Commitment: the New Philosophy of Science*, Chicago: Phoenix edn., University of Chicago Press, 1979.
- Cantrill, Arthur and Corinne, "Australian Landscape and the Practice of Filmmaking", in Programme Notes for the *30th Melbourne Film Festival 5 - 20 June, 1981*.
- Doyle, Michael, "Teaching the Core Culture: Instrumental Values", *New Education* 2/3 (1) 1981: 137-41.
- Fraenkel, J., *Teaching Students to Think and Value*, Englewood Cliffs, N.J.: Prentice Hall, 1973.
- Gough, Noel, "The Descriptive Case Study as a Paradigm for Field Research in Ethology and Ecology", *Speculations in Science and Technology* 2 (5) 1979a.
- Gough, Noel, "Moral Dimensions of Environmental Education", *Unicorn* 5 (2) 1979b.
- Gussow, Alan, "Conserving the Magnitude of Uselessness: A Philosophical Perspective", paper presented at the *National Conference on Applied Techniques for Analysis and Management of the Visual Resource*, Incline Village, Nevada, 23-25 April 1979.
- Kohlberg, L., *Development and Behaviour*, New York: Holt, 1976.
- Kozlovsky, Daniel G., *An Ecological and Evolutionary Ethic*, Englewood Cliffs, N.J.: Prentice Hall, 1974.
- McKenzie, Brian (Director), *Winter's Harvest/Raccolto D'Inverno* (16mm Colour. 35 mins.) Australian Film Commission 1980.
- McKeon, Richard, "The Battle of the Books" in Booth, Wayne C. (ed.), *The Knowledge Most Worth Having*, Chicago: University of Chicago Press, 1967.
- Milligan, Spike, *Open Heart University*, London: M. & J. Hobbs in association with Michael Joseph, 1980.
- Novak, Barbara, *Nature and Culture*, New York, Oxford, 1980.
- Polanyi, Michael, *Personal Knowledge: Towards a Post-Critical Philosophy*. London: Routledge & Kegan Paul, 1958.
- Raths, L., Harmin, M and Simon, S., *Values and Teaching: Working with Values in the Classroom*, Columbus, Ohio, Merrill, 1966.
- Ryan, Kevin, "Teacher Education for a Fair Society", unpublished address to the *10th Annual Conference of the South Pacific Association for Teacher Education*, Perth, Australia, 1980.
- Simon, S., Howe, L. and Kirschenbaum, H., *Values Clarification: A Handbook of Practice Strategies for Teachers and Students*, New York: Hart, 1972.
- Singer, Peter, *Animal Liberation*, London: Jonathon Cape, 1976.
- Singer, Peter, *Practical Ethics*, Cambridge University Press, 1979.
- Stapp, W.B., "An Instructional Programme Approach to Environmental Education (K-12) — Based on an Action Model" in J.A. Swan and W.B. Stapp (eds.), *Environmental Education*, New York: Halstead Press, 1974.
- Stapp, W.B., and Cox, D.A., *Environmental Education Activities Manual*, Ann Arbor, Michigan: University of Michigan Press, 1979.
- Strom, Allen, Letter to the Editor, Australian Association for Environmental Education Newsletter No. 2, May 1980.
- Townend, Christine, *A Voice for the Animals*, Sydney: Kangaroo Press, 1981.

## Acknowledgement

This article is a revised version of "Environmental Education and Ethics", a paper presented by the author to the Second National Conference of the Australian Association for Environmental Education, Brisbane 28 June — 2 July, 1982.