

# Green philosophies in the face of climate change

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## Abstract

Societal attitudes to environmental management are likely to be influenced by the current debates on climate change. Twenty years ago the environmental author, Bill McKibben, first released *The End of Nature*, arguing that anthropogenic climate change had destroyed the idea of an independent natural world. The ramifications of this idea have been slow to seep into the public consciousness, but there are signs now that the thought of the ending of nature is influencing public attitudes in ways that are deeply inimical to responsible forest management, shifting perceptions towards ecocentrism and reducing the legitimacy of foresters as responsible stewards of forested lands.

Climate change presents challenges to forest managers both in a biophysical sense and in the way that it will influence their public support. A shift in societal attitudes towards ecocentric philosophies will restrict forest managers' options in dealing with climate change; however, this shift cannot be countered by scientific research or appeals to reason as ecocentric feelings are based on "feelings." Rather, managers need to understand that changing people's feelings will hinge on changing the way they perceive nature and their views of foresters' ability to manage. Forest managers must promote the concept of humans as responsible stewards of nature. This is not a new idea but, in breaking the dichotomy of people and nature, climate change offers foresters a new opportunity to present their case.

**KEYWORDS:** *deep ecology; ecocentric; forest ethics; philosophy; public opinion; stewardship.*

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## Introduction

People have always sought to understand nature, and to define their place in it. Recent claims of resource depletion and anthropogenic climate change have elevated these arguments from the domain of philosophers into the realm of public debate and policy imperatives. There is no doubt that Western society has become more “environmentally aware” and that this has had broad consequences for land managers and policy makers. Research by Floyd et al. (1997) found that survey respondents with a high level of environmental concern were less accepting of several types of visible impacts on national parks. Often, conflicts arise between elements of society that seek to utilize natural resources, and those that argue for their preservation. At the heart of these debates are fundamental philosophical differences that are often poorly understood by the protagonists.

In this discussion paper, I will begin by briefly outlining the underpinnings of what could be described as a “social green philosophy.” White et al. (2007) quite rightly point out that formal philosophies of the environment encompass a broad range of positions, but it is not my intent to critique those positions or to imply that all environmentalists think in a particular way. Rather, I try to elucidate the “social” philosophy of a significant sector of Western society, those who would consider themselves to be “green” but who have arrived at this position through largely subconscious feelings and emotion rather than through conscious philosophical reasoning. Lee (2009) makes the point that “Whatever other issues may distinguish ecocentrists from environmental pragmatists from ecofeminists, few quibble with the claim that human chauvinism has taken its toll on Earth’s environmental integrity.” Although White et al. (2007) are critical of contrarians for not recognizing the diversity of green philosophies, their use of the term “contrarian” would imply that there are at least some common green views to which one could be contrary. I do not mean to belittle these diverse viewpoints, but I would argue that the social philosophies of society are of far more relevance to policy makers and land managers than are the somewhat esoteric arguments of formal philosophers. It must also be noted that the themes of this article relate to the dominant Western influences in economically developed countries, and that other philosophical, social, and economic drivers are likely more important in other situations.

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The term “green” is used here to describe those who would consider themselves as supporting environmentalism in Zimmerman’s (2004) first sense of the word: “. . . the variegated twentieth century movement seeking to limit or even to halt human destruction of the natural environment, especially ‘wilderness’ . . .” Here, I argue that the social green philosophy, which has developed among much of North American and Australian society, rests on the primary tenet that nature is “better” if human influence is minimized. Although this is undoubtedly an oversimplification from a formal philosophical perspective, the purpose of this article is not to argue philosophy but to explore the development of societal attitudes and to speculate on possible future directions that those attitudes may take.

Developments in media and communications over the past five decades have strengthened the influence of society over land use decisions. Local land managers that once had a high degree of autonomy (and a belief that they were best placed to make informed decisions) came under increasing scrutiny from a predominantly urban-based society. In attempting to argue their position, the land managers failed to recognize the fundamental philosophical differences between themselves and the growing green movement. Many land managers still do not, which can lead to a lack of public support for management goals and considerable resistance to individual management actions.

Climate change is widely expected to have significant consequences for forest managers and conservationists (Eastaugh 2008); however, there is a remarkable lack of published ideas for concrete responses in particular areas (Eastaugh et al. 2009; Heller and Zavaleta 2009). It is possible that managers are hampered by a lack of clear direction from policy makers, who in turn are dependent on still-forming public opinions.

The purpose of this discussion paper is to show the core drivers of social green philosophy in North America and Australia and to explore the possible effects of climate change on public environmental attitudes. Following a brief review of the primary drivers of current environmental attitudes, I develop the thesis that current green attitudes are somewhat uncertain because of the impact of climate change on the natural world (described by McKibben [2003] as “The End of Nature”). One possible outcome is a popularization in broader society of ecocentric views (Næss 1973), which would severely hamper the ability of forest managers to responsibly conduct their duties. To counter this, foresters need to further develop the “stewardship” ethic and to promote it in the public consciousness.

## Man<sup>1</sup> and nature

The philosophical differences between resource managers and the green movement hinge on differing ideas of the proper relationship between Man and Nature. This, in turn, depends on exactly what people consider Nature to be. McKibben (2003) elaborated at length on the argument that nature may be defined as “that which is separate from man.” This is not a new concept; indeed, the roots of this idea stretch far into antiquity. Although societal views of nature (or of its seemingly purest manifestation, wilderness) have undoubtedly changed, the theme of Nature as separate from Man is common.

The Old Testament view is summed up in Jeremiah 2:6:

*Neither said they, where is the Lord that brought us out of the land of Egypt, that lead us through the wilderness, through a land of deserts and pits, through a land of drought, and of the shadow of death, through a land that no man passed through, and where no man dwelt.*

Jeremiah 51:43 continues in the same vein:

*. . . a wilderness, a land wherein no man dwelleth, neither doth any son of man pass thereby.*

Biblical wilderness was clearly an unpleasant place, uncivilized and dangerous.

In the eleventh century, Alain of Lille presented Nature as a goddess, and placed her at a middle level of influence, between Man and God:

*And therefore in a comparison of three steps, we can find three grades of power; so that the power of God may be called the superlative, that of Nature the comparative, that of man the positive (Moffat [translator] 1908).*

Further on in Alain’s “Complaint of Nature,” Nature says to Man:

*Since all things are by the law of their being held subject to my laws, and ought to pay to me a rightful and established tribute, almost all, with just dues and with seemly presentation, regularly obey my commands; but from this general rule man alone is excluded by an abnormal exception . . . But man, who exhausted the treasury of almost all my riches, tries to overthrow the natural impulses of nature, and arms against me the violence of wicked lust.*

Nature in this view is a divinity, but still nevertheless susceptible to damage by Man, because Man is able to disobey Nature’s rules.

The Puritan view of nature involved nature being “the ordinary power of God,” in the sense that God’s power infuses His Creation. Chase (2001) summarizes Perry Miller’s works (*The New England Mind: The Seventeenth Century and Errand into the Wilderness*) in tracing the evolution of this idea through to the Romantic period, and Horace Bushnell’s 1849 declaration that “God is the spiritual reality of which nature is the manifestation” (Chase 2001:44). Romantic views of nature in the mid-19th century are encapsulated by Thoreau’s description of wilderness in *The Maine Woods*:

*Man was not to be associated with it . . . not even the surface had been scarred by man, but it was a specimen of what God saw fit to make this world (Thoreau Society 2008a).*

Thoreau was quite clear about wild nature’s attitude to humanity, at one stage having Nature say to Man:

*. . . This ground is not prepared for you . . . I have never made this soil for thy feet, this air for thy breathing, these rocks for thy neighbors. I cannot pity nor fondle thee here, but forever relentlessly drive thee hence to where I am kind. Why seek me where I have not called thee, and then complain because you find me but a stepmother? (Thoreau Society 2008b).*

<sup>1</sup> For consistency with historic and legal works quoted in this section, the term “Man” is used here in preference to gender-neutral alternatives. No gender specificity is implied.

Although Thoreau had a reverential attitude to nature, he saw the wilderness as a place where people had no right to be. His contemporary, George Perkins Marsh, was more pragmatic but also maintained a clear separation between Man and Nature, echoing Alain de Lillo in saying:

*But man is everywhere a disturbing agent. Wherever he plants his foot, the harmonies of nature are turned to discords . . . man alone is to be regarded as essentially a destructive power, and that he wields energies to resist which, nature—that Nature whom all material life and all inorganic substance obey—is wholly impotent, [proving] that, though living in physical nature, he is not of her, that he is of more exalted parentage, and belongs to a higher order of existences than those born of her womb and submissive to her dictates (Marsh 1864:36).*

The current legal definition of wilderness in the United States is contained in the 1964 *Wilderness Act*, which states:

*A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable . . . [emphasis added].*

The *Wilderness Act* clearly differentiates “the forces of nature” from “the imprint of man’s work,” reinforcing the idea of wilderness as the purest manifestation of nature.

Although the views of nature described above are quite different, the common theme is that nature is something apart from humanity. McKibben (2003:69) is in line with these traditions when he says “. . . in our modern minds nature and human society are separate things.” Indeed, McKibben (2003:68) goes so far as to define nature primarily by its separation from human society. He is able to dismiss arguments that man is part of nature, by describing his own views as “instinctive,” and by saying that this is a “semantic” argument, and

that “. . . none of us, on the inside, quite believe it.” Hay (2002) similarly avoids conventional logic, describing the driving forces behind a commitment to green ideals as “pre-rational.” These Western environmental attitudes are in stark contrast to Indigenous ideals, which hinge on the integration of man as part of nature, as, for example, “. . . just a strand in Mother Nature’s offerings” (Mary Thomas of the Secwepemc people of British Columbia, reported by Brigham and Ralph 2005).

Although the dichotomy between humanity and nature (or the “nature/artifact distinction”) has been hotly debated by philosophers since Aristotle’s time, there is little doubt that Western environmentalism depends on keeping some definition of “nature” that precludes the works of modern society (Preston 2007). This demonstrates two of the central pillars of social green philosophy: the definition of nature as “that which is not man” and a willingness to put “instinctive beliefs” at least on the same level with reason as a basis for decision making.

To determine humanity’s proper relationship with nature, social green philosophy relies on a teleological view of the world. Teleology was an ancient Greek philosophy that held that all things have a proper form or function, a way that they are “meant to be” (Perlman 2004). Proper conduct for a person depends on supporting the way that things are meant to be. Applying this to nature, we arrive at the third pillar of social green philosophy—because the proper form of nature is by definition “not man,” for man to interfere with nature is improper. This gives rise to a vague (though widely held) view that “Nature knows best,” and that nature is somehow “better” if man’s interference is minimized. This attitude then results in support for what is sometimes described in the international literature as the “Yellowstone model” of protected area management (Kalamandeen and Gillson 2007), and the counterproductive assumption that “wilderness” is the highest form of nature (Cronon 1995).

## Climate change

Anthropogenic climate change is widely expected to have far-reaching consequences for the natural environment (U.S. Department of Agriculture 2000; Parmesan 2006). This may include species extinctions, biome redistributions, altered disturbance regimes through changing fire and pest infestation patterns, and altered physiological and phenological characteristics of many species. With research, experimentation, adaptive

management, and policy flexibility many of these challenges may be manageable (Spittlehouse and Stewart 2003), but any efforts by resource managers must maintain a high degree of public support to be effective. To that end, it is useful to examine the impact of climate change on green philosophy, and to attempt to predict the direction that this philosophy will lead society.

The bulk of published scientific opinion holds that human activities will have an appreciable effect on climate. The level of uncertainty in what this will actually mean though, tells the public that “science does not have all the answers.” The impact of this on social green philosophy is twofold: firstly, an idea that modern society has erred, and is not good for nature; and secondly, that science cannot necessarily be trusted to find solutions.

Clearly, anthropogenic climate change is “interference with nature” on a grand scale. It is not surprising that the first response of many greens was to demand an end to climate change, regardless of the consequences to society; however, governments’ national interest and human self-interest have proven resistant to major economic and social restructuring, which may lead some advocates for limiting CO<sub>2</sub> emissions to overstate the case in an effort to shift public inertia. While there may be merit in stabilizing the concentration of greenhouse gasses in the atmosphere, the apocalyptic forecasts from many commentators tends to reinforce the idea that human interference with nature is an inherently bad thing.

The mainstream environmental movement is also struggling with how to deal with climate change. Shellenberger and Nordhaus (2004) contended that the movement’s effectiveness has become limited, largely through a habit of seeing “the environment” as separate from society. Although this approach may have had its successes in the past, it is failing in the global warming debate because the environmental issues are so deeply intertwined with economic and social issues.

Climate change is posing difficult questions for wildlife conservation groups (Hannah et al. 2002; Dean 2008): coastal wetlands are threatened by rising sea levels, forests may encroach on grasslands, and many protected areas may no longer be appropriate climatically to fulfill their intended purpose. This has prompted calls for an increase in protected areas to allow for species migration and a reduction in anthropogenic stressors (World Conservation Monitoring Centre 1999), or for seed banks, refuge colonies, or genetic engineering (Hansen et al. 2001). Greenpeace has

warned of “. . . the effective end of industrial civilization” (Greenpeace 2009).

From this perspective, climate change represents the “end of nature,” as there is nothing remaining that is independent of man. Having defined nature by its separation from man, the realization that this separation no longer exists is devastating to social green philosophy. For those who profess to love nature, man’s ending nature is clearly intolerable, and there is a sense that modern society should be expected to pay the price for its sins.

One of the founding pillars of social green philosophy is no longer tenable, and a new paradigm must be found as a means to redefine nature. A clear direction in many forums is a move towards “deep ecology.”

### Deep ecology and ecocentrism

Deep ecology is an ecocentric philosophy based on the work of Næss (1973), who is happy to admit that his ideas are based on intuition, rather than logic or induction. Humanity is seen as a part of nature but not an especially important part—just one species of no greater value than any other species. Humanity is to have no greater claim on the Earth’s resources than does any other living thing. Modern civilization is identified as being bad for the environment, and therefore is immoral and must be abandoned (Smith and Sauer-Thompson 1998).

The deep ecology movement expressly calls for a reduction in human population, and fundamental changes to economic, technological, and ideological structures. It is a rejection of the humanistic and anthropocentric views that have shaped civilization since the times of the ancient Greeks. Humanity is often presented as a “virus” (Meacher 2003), a “disease” (Lovelock 2006), or a “cancer” (Brown et al. 1998:4) on the body of the Earth. Deep ecology has a strong spiritual and mystic focus, and is linked to Gaian Earth Goddess religions and the formulation of a planetary consciousness.

Deep ecology has been criticized theologically (Pontifical Council for Justice and Peace 2004), on scientific grounds (as relying on outdated ideas of climax ecology and a “balance” of nature) by Botkin (2000), philosophically (Grey 1993), and as an affront to social justice (Bookchin 1987, 1988). Ecocentric views provide the philosophical foundation to radical environmental groups such as EarthFirst, the Earth Liberation Front, and the Animal Liberation Front.

In dismissing society's right to mould our environment, ecocentrism removes any hope humanity has of improving our own lot, or of actively improving the state of our environment. It is a retreat from management, and an abrogation of our responsibility to our fellows and to the world. Climate change adds to the impetus of ecocentrism, as anthropocentric philosophies are held not only to be responsible for the perceived problem but also incapable of finding solutions to a perceived crisis. McKibben (a staunch supporter of ecocentrism) was himself recently described as "... one of the most influential environmental writers of our time" (Levy 2005:177) and *The End of Nature* celebrated as "... a citation classic and foundation work in the area of environmental studies" (Luke 2005:202).

Ecocentrism develops a radically different view of nature than was evident in pre-climate change social green philosophy, but in many ways it sits comfortably because of its consistent take-home message that "interference with nature is wrong." Although it is unlikely that the willful destruction of modern society will find many supporters in the mainstream West, ecocentrism is having a noticeable effect in informing social green philosophy in ways that directly affect resource managers.

### Implications of ecocentrism

A movement developed by "airy mystics and reactionary misanthropes" (Bookchin 1991) seems unlikely to take root in mainstream society, but there are indications that these ecocentric views are beginning to strongly influence social green philosophy. Ecocentrism is having an impact from the highest levels of policy formulation through to local councils and environmental groups, and is widely disseminated in schools.

The *Earth Charter* (Earth Charter Initiative 2000) is an avowedly ecocentric document (Devall 2001; Duarte 2001), and has been endorsed by several international and United Nations agencies including UNESCO and the IUCN. This would seem to imply that many future international agreements and treaties will be influenced by ecocentric principles. Many mainstream environmental groups are sympathetic to deep ecology, and ecocentrism is commonly presented in school and college classes as being an "advance" on anthropocentric philosophies. Academics heavily involved in the Earth Charter Initiative are responsible for producing research and other documents with a strong focus on influencing national forest policies (i.e., Mackey et al. 2008). While Duarte (2001) recognized the rise of ecocentrism as

a "symbolic" movement only, his discussions relate to the attitudes of major environmental organizations in response to globalization. Duarte (2001) does not address the changes to societal attitudes brought about by global warming.

Institutional support for ecocentrism combines with a growing sense of public unease about global warming, to influence social green philosophy further towards a "hands off" approach to land. Forty years ago, foresters were astonished when they did not automatically win the "Trees versus Jobs" debate. Today's foresters should be preparing themselves for the "Trees versus Society" debate. Without preparation, foresters could often find themselves on the losing side of this too. It is not unlikely that public pressure will mount to reduce the current (minimal) human impacts on designated wilderness areas, to increase the extent of those areas, and to apply the same management prescriptions (or lack thereof) to state forests, private forests, plantations, and agricultural land. Although the irrationality of this on a broad scale is readily apparent, the social philosophies of a society are not based on reason but on feelings. The feeling is growing that we should not manipulate our forests.

In a recent review of the adaptations of forests to climate change (Eastaugh 2008), I suggested that forest managers in the near future will be faced with three broad possible approaches:

1. Try to preserve 20th century ecosystems through active, management-intensive conservation efforts;
2. Try to decide on an "ideal" possible future landscape biotic structure, and actively promote its development; or
3. Do nothing, and live with whatever consequences climate change may have.

Of course, the ideal situation would be to examine each of these possible options on a case-by-case basis; however, if the right to manage is taken away from land managers, the only option available will be the last.

### Alternative viewpoint: Stewardship ethic

Foresters readily accepted the concept of sustainable forest management. The principle of managing forests with due regard to environmental, social, and economic goals fits well with foresters' views of themselves as responsible land managers. This has always been the case, recognizing that managers have always been constrained by the knowledge limitations

of the day. Nevertheless, the debate is now shifting from which management actions are appropriate, to whether management is appropriate (Pollan et al. 1990). Controversies regarding fire management in wilderness areas are well known, and this debate is likely to intensify and spread to other aspects of forest management, such as weed eradication, pest control, and species composition. I would argue that we not only have a right to manage our environment but, with ecosystems facing new challenges through climate change, we have a duty to interfere.

The concept of humanity as nature's steward has a long history. Indigenous peoples are often presented as having a stewardship approach to the environment. Krech (1999:208) cited the examples of Quebec's Innu, who describe their attitude to land as "guardians." The Christian tradition holds that the world is God's creation, and that people (created in God's image) have a responsibility to care for it well. In the mid-19th century, George Perkins Marsh documented numerous historical examples of civilized man failing to protect the natural environment, and concluded that:

*Notwithstanding the difference of conditions between the aboriginal and the trained forest, . . . the sooner a natural wood is brought into the state of an artificially regulated one, the better it is for all the multiplied interests which depend on the wise administration of this branch of public economy (Marsh 1864:304).*

Marsh recognized the impacts of humanity on nature but, far from calling for a withdrawal, pointed out the need for more intensive management to ensure the minimization of harm.

Stewardship is a staunchly anthropocentric philosophy, irreconcilably at odds with ecocentrism. It places humanity firmly at the top of the evolutionary tree, with the right and responsibility to manage it as we see best. Of course, precisely what is "best" will be the subject of endless debate, but society's right to manage our environment is unquestioned.

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Stewardship is sometimes presented by elements of the environmental movement as simply being a "front" for resource extraction, but this is a red herring. If society requires resource extraction, then our commitment to responsible stewardship requires us to manage that extraction sustainably, in a way that does not unduly compromise society's other needs or the needs of society in the future.

Social green philosophies influenced by ecocentric attitudes inhibit responsible stewardship of forests because these philosophies question humanity's right to manage our environment and our capacity to manage the Earth wisely. The first originates from pre-climate change attitudes regarding the separateness of nature, and the second is propelled by the sense of crisis engendered by global warming. Both must be refuted if we are to discharge our duty to the world around us, but simply debating the facts or presenting reasoned arguments will not be sufficient. Forest industries have had problems with their public image since the emergence of the environmental "movement" in the 1960s (e.g., see Chase [2001] for a detailed account). The response of the forest industry has been singularly ineffective because it based its arguments on reason. Their "opponent" is not a reasoning entity but a social philosophy. Effective tactics in gaining public support must depend on feelings, not just reason. Changing people's feelings will hinge on changing the way that they perceive nature and their views of foresters' ability to manage. Society's perceptions of nature are fluid (Williams 2002) and thus the chance exists for land managers to steer the debate. Climate change presents us with the opportunity to move beyond the dichotomy of people as separate from nature and to re-establish the idea of nature as society's responsibility. Thompson (2009) argued that humanity is fearful of taking responsible for the natural world, an attitude that certainly leaves open the opportunity for someone to offer reassurance.

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Cronon (1995) suggested that one of the greatest barriers to responsible environmentalism is the wilderness concept itself. By glorifying wilderness as the ultimate in nature, we devalue nature in other places. Forest agencies have in many cases contributed to this, encouraging a tourism experience that is focussed firmly away from the human influences, which are present in any area. Greater attention should be placed on educating the public about the Indigenous and historic influences that have shaped the land, promoting the full forest history of an area rather than only its non-human elements.

The notion that some regions should be “preserved” is counter-productive. Preserved from what? If the purpose is to manage an area primarily for the benefit of a particular species or assemblage of species, then this should be made clear. If the main purpose is to provide an area for visitors to experience beauty and solitude, then manage that area accordingly. Some areas should certainly be set aside from management, simply for the scientific purpose of having something with which to compare managed areas (Cole 2001). Label these as “reference regions,” and make their purpose obvious. In all cases, the insinuation that “unmanaged” is in any way superior to “managed” must be guarded against.

The cultural aspects of forests need to be better promoted. Forestry professionals understand the joys of watching a regenerating forest stand over a period of decades, or driving on a perfectly cambered forest road, or hunting to maintain stable wildlife assemblages, or watching salmon navigate a well-designed fish ladder. As mentioned in earlier debates (Rolley 2001), forest managers need to communicate these feelings better, and promote the same understandings throughout society. Works in the forest should be a source of pride and respect, not something to be hidden away or excused. The public must be educated to accept the legitimacy of what foresters do.

In practice, there are things that foresters could do to support a shift in public feelings regarding their work. At all levels, the impact of their work on the public consciousness needs to be taken into account. Aesthetics is important and can range from the simple tidy appearance of forest officers and equipment through to road siting and the size and shape of forest management areas. In some cases, harvest prescriptions could be changed based on aesthetics, in the realization that some compromise of strictly environmental or economic goals is necessary to maintain important social acceptance.

The forest history of any area is a fascinating topic, and organizations such as the Forest History Society in various jurisdictions can play a vital role. The integration of society with nature should be stressed; showing examples of how this has worked well in the past will help give confidence that the future can be well managed. Primarily, forest managers need to show the benefits of society interacting with the environment. As an example, the only justification for steel or pre-fab concrete bridges is cost; however, the use of locally sourced timber gives us both a more aesthetically pleasing structure and demonstrates positive use of natural resources. Indeed, the use of local materials, wherever possible, should be a management principle in all areas, as this points directly to the sustainability of the management prescription.

## Conclusion

Climate change will test forest management not only through novel biophysical effects but also through contributing to the attitudes of society. There are indications that climate change will push societal attitudes towards a more anti-interventionist stance regarding resource management, which will inhibit foresters’ ability to tackle the biophysical challenges ahead. The influence of ecocentric philosophies on society must be resisted if we are to satisfactorily discharge our duty to our environment.

Forestry’s record in attracting the support of society is poor because arguments in the past have relied solely on reason, not recognizing the importance of emotion

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and subconscious feelings in people's attitudes. Actions and policies need to adapt, to assert forest managers' legitimacy, and promote public confidence in their abilities. The notion of "wilderness" being the ultimate expression of nature must be tackled head on, and any hint that unmanaged areas are simply by definition superior must be refuted. Foresters need to stress their integration with nature, not to excuse it.

Climate change poses threats, but also the opportunity for forestry as a profession to regain its place in the public imagination as supporters of nature, rather than opponents.

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## Test Your Knowledge . . .

### *Green philosophies in the face of climate change*

How well can you recall some of the main messages in the preceding Discussion Paper?

Test your knowledge by answering the following questions. Answers are at the bottom of the page.

1. In the opinion of the author, “deep ecology” is:
  - A) Generally supportive of the wise use of natural resources for the betterment of humanity
  - B) An obscure alternative philosophy of no relevance to forest managers or policy makers
  - C) A risk to the sustainable management of forests
  
2. The best way to manage forests in the face of climate change is to:
  - A) Use management to try to preserve current ecosystems
  - B) Decide on an “ideal” future landscape and promote its development
  - C) Leave ecosystems to adapt without interference
  - D) Choose from a range of options depending on the individual circumstances
  
3. Forest managers can best increase public support for their actions by:
  - A) Exhaustively explaining the scientific rationale
  - B) Demonstrating their integration with nature
  - C) Detailing the economic advantages

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**ANSWERS**

1. C 2. D 3. B