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DISSEMINATION FOR THE
MASTER OF ARTS DEGREE
IN ENVIRONMENT, POLICY
AND SOCIETY

In search of the ecocentric urbanite:
Recognition of the intrinsic value of an urban
wildlife area by South London residents

Jodie J. Bettis
BSc (Hons) Open

March 2007
Abstract

With over half the population of the Earth living in urban areas, the value systems of urbanites are an important consideration if eco-friendly urban development is to be achieved. Yet, some claim there is no widespread ecocentric orientation in Western culture and urbanisation distances humanity from nature, resulting in reduced value recognition. In an urban wildlife area in London, these claims are investigated using quantitative and qualitative methods. First, the New Ecological Paradigm scale assesses the worldview orientation of urban residents encountered. Next, semi-structured interviews with the most ecocentric urbanites focus on intrinsic value recognition and the articulation of objective intrinsic value. Results indicate local wildlife trust volunteers are more ecocentric than visitors to the site, with those expressing the most environmental values also recognising the highest total number of intrinsic values. The majority of volunteers articulate at least one objective intrinsic value with many discussing aspects of biophilia, urbanophilia, and stakeholder engagement in urban planning policy. The study concludes that ecocentric urbanites exist and urbanophiles do not always suffer the hypothetically expected reduction in environmental value recognition. However, it is unclear whether or not the ecocentric orientation found in this study is a prerequisite or a result of the experience of volunteering, suggesting further research into pre- and post-volunteering ethical orientations - perhaps with younger, less environmentally protective participants - is required.
In search of the ecocentric urbanite: Recognition of the intrinsic value of an urban wildlife area by South London residents
Jodie Bettis

Statement of Authorship

I, Jodie Bettis, author of this dissertation, state that this document has been prepared solely by myself for submission for the qualification of Master of Arts in Environment, Policy and Society of The Open University. No part of this dissertation has been previously submitted for a degree or any other qualification of The Open University, or any other university or institution. As sole author, I take full responsibility for any errors herein.
Acknowledgements

I would like to thank my supervisor at the Open University - Claire Appleby - for all her invaluable guidance and support, Dr. Lucy Stirling for her statistical advice, and Ian Holt of the London Wildlife Trust for his help, co-operation and local knowledge of my local institutionally protected urban wildlife area. I am also indebted to the small army of enthusiastic volunteers at Sydenham Hill Wood – Pat, Rachel, Sarah, Joy, Jane, Sarah, Adrian, Andrew, Marc and John – without whom I would have had no data to analyse.
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<th>Description</th>
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<tbody>
<tr>
<td>DCLG</td>
<td>Department for Communities and Local Government</td>
</tr>
<tr>
<td>DETR</td>
<td>Department of the Environment, Transport and the Regions</td>
</tr>
<tr>
<td>DoE</td>
<td>Department of the Environment</td>
</tr>
<tr>
<td>FST</td>
<td>Full Spectrum Total</td>
</tr>
<tr>
<td>GLA</td>
<td>Greater London Association</td>
</tr>
<tr>
<td>IVT</td>
<td>Intrinsic Value Total</td>
</tr>
<tr>
<td>LDF</td>
<td>Local Development Framework</td>
</tr>
<tr>
<td>LWT</td>
<td>London Wildlife Trust</td>
</tr>
<tr>
<td>NDPB</td>
<td>Non-departmental Public Bodies</td>
</tr>
<tr>
<td>NEP</td>
<td>New Environmental / Ecological Paradigm</td>
</tr>
<tr>
<td>NERC</td>
<td>Natural Environment and Rural Communities (Act)</td>
</tr>
<tr>
<td>ODPM</td>
<td>Office of the Deputy Prime Minister</td>
</tr>
<tr>
<td>RSPB</td>
<td>Royal Society for the Protection of Birds</td>
</tr>
<tr>
<td>SSSI</td>
<td>Site of Special Scientific Interest</td>
</tr>
<tr>
<td>UWA</td>
<td>Urban Wildlife Area</td>
</tr>
<tr>
<td>Viz</td>
<td>Visitor(s)</td>
</tr>
<tr>
<td>Vol</td>
<td>Volunteer(s)</td>
</tr>
<tr>
<td>WCED</td>
<td>World Commission on Environment and Development</td>
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Glossary of Keywords & Concepts

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Biophilia</td>
<td>The preference for natural environments and the related ‘connectedness’ to non-human lifeforms</td>
</tr>
<tr>
<td>Ecocentrism</td>
<td>Opposite of anthropocentrism (or human-centred ethic). Recognises the intrinsic value of both biotic and non-biotic elements of holistic ecosystems</td>
</tr>
<tr>
<td>Intrinsic value</td>
<td>Opposite of instrumental value and thus a non-use attribute. Can denote an object has intrinsic value (or ‘inherent worth’) independent of a human valuer, i.e. it is worthwhile in itself.</td>
</tr>
<tr>
<td>Full Spectrum Total</td>
<td>An individual’s score of articulated environmental values. Encompasses broadest possible range of values (Maximum = 30)</td>
</tr>
<tr>
<td>Intrinsic Value Total</td>
<td>An individual’s score of articulated intrinsic values. Encompasses a narrower ecocentric subset of the full spectrum (Maximum = 23)</td>
</tr>
<tr>
<td>Urbanite</td>
<td>A dweller in a city or town</td>
</tr>
<tr>
<td>Urbanophile</td>
<td>A person who holds pro-urban attitudes, highly valuing urban characteristics such as the ‘hustle and bustle’ of a city</td>
</tr>
<tr>
<td>Urbanophobe</td>
<td>A person whose Ideal City would be free of urban characteristics such as cars, pollution, and violence</td>
</tr>
<tr>
<td>Urban wildlife area</td>
<td>A zone of natural habitat within a densely populated town or city maintained or protected primarily for the benefit of wildlife</td>
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Chapter 1: INTRODUCTION

Urbanisation has decreased the physical space available for indigenous wildlife and pushed it to the outer limits of human conurbations. However, amongst built up, densely populated, urban areas, wildlife survives in green spaces. In Southwark (South London), Sydenham Hill Wood survives as one of the last remaining fragments of the ancient Great North Wood (The Wildlife Trusts, 2003). Hemmed in on all sides, it has been encroached upon since the 16th century by the need for affordable housing within easy reach of the City of London.

Now leased and managed by The Wildlife Trusts, who’s primary objective is to acquire land as nature reserves to protect wildlife (ibid), this prized safe haven for flora and fauna is currently defended from development and is designated a Local Nature Reserve (London Wildlife Trust, 1996) and a Site of Metropolitan Importance for Nature Conservation (GLA, 2003). Consequently, this site has institutional importance in terms of its ecological significance, however, the non-economic value of this urban wildlife area¹ (UWA), and specifically whether the site’s intrinsic value is recognised by local residents, was previously unknown (Ian Holt, Site Manager, personal communication).

Environmental philosophers and ethicists have long sought to justify the intrinsic value of nature (Goodpaster, 1978; Regan, 1981; Rolston, 1983; Pluhar, 1983;

¹ ‘urban wildlife area’ is here taken to mean a zone of natural habitat within a densely populated town or city, maintained or protected primarily for the benefit of wildlife.
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Callicot, 1985; Taylor, 1986; Haught, 1986; Johnson, 1992; Plumwood, 1993) and yet the term has come to have multiple meanings. Although primarily used in contrast to instrumental value, i.e. the object has a use or is a means to an end (Rolston, 1992), intrinsic value often describes non-use attributes such as beauty or tranquillity. This differs from the alternative definition, namely ‘inherent worth’, which denotes the object has value independent of the human valuer and is thus worthwhile in itself (ibid). It is this latter definition of intrinsic value that the researcher will centre on and utilise as an indicator of a person’s environmental ethic or worldview orientation.

The discourse surrounding the elusive and almost intangible property that is the intrinsic value of nature, takes place within the academic worlds of environmental psychology, philosophy and economics. Isolated studies in each of these academic disciplines have focused on the relationship between elicitation of the value of nature and the worldview orientation of the participant (Kortenkamp & Moore, 2001; Morito, 2003). However, a uniquely broad ranging study by Lockwood (1999) attempted to integrate these three disciplines to simplify the complex array of human-nature values to further clarify the locus of individuals’ value perception in terms of their anthropocentric (human-centred) or ecocentric (non-human / biospheric) orientation.

According to Lockwood, a much misinterpreted and inappropriate definition of intrinsic value has lead to an array of flawed survey test scales (e.g. Dunlap &
Van Liere, 1978; Dreger & Chandler, 1993; Gagnon Thompson & Barton, 1994; Kempton et. al, 1995) that were designed to elucidate intrinsic value and a correspondent ecocentric orientation. The failure to disassociate ‘intrinsic’ from ‘instrumental’ value, and perhaps the further distinction between ‘intrinsic value’ and ‘inherent worth’, led Gardner & Stern (1996) to conclude that there may be no widespread ecocentric orientation in western culture (Lockwood, 1999).

As the term intrinsic value has recurrently been ambiguously or opaquely defined, much of the resultant empirical research in this area is unsound. Therefore, in order to address the validity of the claim by Gardner & Stern, further exploration using clarified terminology is necessary (ibid). Chapter 2 thus seeks to clarify the term intrinsic value prior to collating and analysing primary sources of information that may support or refute hypotheses that suggest that there is no widespread ecocentric orientation in Western culture.

The setting of the primary aims and objectives of this study against an unresearched UWA in South London (Ian Holt, Site Manager, personal communication) contributes - by way of new empirical data - to the area of urban environment ethics. As the state-of-the-art review in Chapter 2 reveals, the literature within the aforementioned socio-environmental academic disciplines of psychology, philosophy and economics shows up a so-called “blind spot in environmental ethics” and an almost environmental disvalue of urban habitats (Light, 2001: 7). Disconnected from nature, city dwellers have been described as
suffering from “a moral corruption” (Light, 2001: 8) as they lack the full set of values required to fully respect their urban habitat (Rolston, 1994). As few studies have addressed the complexities of environmental value and orientation dualities (Kortenkamp & Moore, 2001) or have placed these key concepts in the context of urban environments, this research will go some way toward filling that gap. Furthermore, as there has been limited address of the ethical and normative implications of this epistemic deficit (Light, 2001), Chapter 5 attempts to contextualise the results of this study in light of philosophical and policy related arguments.

As more than half the population of the Earth is reported to currently be living in urban areas (United Nations, 2004), the value systems and orientations of urbanites\(^2\) are now important considerations in environment and development decision-making. For example, in the United Kingdom, environmental planning and policy has shifted towards incorporating multi-use values, wider public participation and increased transparency in decision-making processes (Henwood & Pidgeon, 2001) and development of the urban environment is now seen as part of rather than apart from the natural environment (Basiago, 1999).

However, as argued in Chapter 5, although many values attached to urban green spaces are of non-economic environmental benefit, the intrinsic value of UWAs and the concomitant ecocentric orientation of the human valuer are yet to be fully

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\(^2\) Urbanite - A dweller in a city or town, (OED, 1989)
appreciated by environmental decision-makers (Tyrväinen, 1997). Furthermore, there is a feeling amongst environmental non-governmental organisations that the current push for economically expedient land use planning may undermine local democracy as it prioritises business interests over the value systems of the local community (Friends of the Earth, 2006) – both human and non-human.

1.1 Aim of Investigation and specific research questions

Using a combination of survey and semi-structured interview methods, together with a critical state-of-the-art review of the existing knowledge surrounding the research topic, this investigation aims to go some way toward refuting or supporting hypotheses that suggest that as there is no widespread ecocentric orientation in Western culture, there can be few, if any, ecocentric urbanites. The empirical evidence gathered to support the existence of ecocentric urbanites will help elucidate possible implications of UWA valuation for urban planning and environmental decision-making, thus contributing to the limited knowledge regarding non-monetary valuation of urban green spaces primarily protected for the benefit of non-human species.

In Sydenham Hill Wood in South London, the researcher went in search of a group of people who exhibit this potentially rare view of the world. First a preliminary survey was carried out to quantitatively categorise a participants general worldview orientation as, a) strong anthropocentric, b) inconclusive, or c)
ecocentric. In order to confirm ecocentric orientation and to allay suspicions of briefly masqueraded weak anthropocentrism (Morito, 2003), survey participants exhibiting the strongest ecocentric tendencies were asked to take part in semi-structured qualitative interviews to explore further their recognition of intrinsic value in nature. Chapter 4 documents both the semi-quantitative preliminary survey (Phase One) and the qualitative semi-structured interviews (Phase Two), which explore the potential ecocentric urbanites’ recognition of intrinsic value whilst in their local UWA of Sydenham Hill Wood.

In order to elicit perceived intrinsic value of this institutionally protected UWA and the correspondent ecocentric orientation of participant South London urbanites, a number of questions were posed to help structure the research process. This study aims to find answers to the following questions:

- Do urbanites visiting Sydenham Hill Wood, who by virtue of being there can be taken to assign instrumental value to the UWA, also recognise intrinsic value of the site?
- Do those who initially exhibit ecocentric tendencies continue to recognise intrinsic value of the UWA, or does intrinsic values recognition evaporate into a weak anthropocentric orientation on further examination?
- What are the implications of the recognition of, or ignorance of, intrinsic value of UWAs in terms of urban planning and environmental policy?
In order to answer fully these specific questions, the researcher discussed nature’s spectrum of values with ecocentric urbanites. However, before searching the urban wildlife area for these hypothetically rare people, the key terms and concepts used to orient oneself philosophically and politically around the chosen research topic are discussed in the state-of-the-art review in the following chapter 3.

3 A glossary of key words and a list of abbreviations are included on pages 7 & 8 of this document for ease of reference.
Chapter 2: STATE-OF-THE-ART REVIEW

2.1 The global to national policy context of UWA protection

They took all the trees
And put them in a tree museum
And they charged all the people
A dollar and a half to see ’em
Don’t it always seem to go
That you don’t know what you’ve got
Till it’s gone
They paved paradise
And they put up a parking lot

Big Yellow Taxi, Joni Mitchell, 1970

2.1.1 Sustainable development

In 1999, over ten years after the phrase “sustainable development” was coined and clarified by Gro Harlem Brundtland in the seminal work Our Common Future (WCED, 1987), and seven years after 173 world leaders came together in Rio de Janeiro for the first ever Earth Summit, the UK Government published A better quality of life: a strategy for sustainable development for the United Kingdom (DETR, 1999a). This document set out the national principles, priorities, actions and commitments the UK Government would adopt in order to fulfil the
international obligations it had signed up to in the Rio Declaration at the Earth Summit in 1992.

The UK strategy sets out the case for the use of indicators to measure progress towards its aim to “ensure a better quality of life for everyone, now and for future generations to come” (DETR, 1999b: 8). Quality of life pertains to human life, although Richardson argues that a ‘biocentric’ approach to the human condition, with its emphasis on quality of life rather than quantity of material possessions, enhances the non-material dimension of the human experience and recognises that the pursuit of wealth is incompatible with the Earth’s finite resource base (Richardson, 1997: 45).

The meaning of the term ‘biocentrism’ are considered later in Section 2.2.5; for now it is noted that the UK strategy, although designed to cover the environmental, social, and economic dimensions of sustainable development, prioritises economic growth over environmental protection (ibid: 16). Only one of the fifteen headline indicators targets the protection of a non-human species – birds – even though a seminar convened in late 1996 by the Department of the Environment to discuss the proposed indicators showed that policy-makers were concerned that measures to monitor the quality of habitats and groups of species were weak and/or missing from the proposed text (DoE, 1996: 9).
The normative balance between the environmental, social and economic aspects of sustainable development continues to divide opinion. As a concept, sustainable development has been criticised as being contradictory (Richardson, 1997; Magnaghi, 2000), ill defined (Jacobs, 1999), morally repugnant and logically redundant (Beckermann, 1994), a greenwash over capitalist exploitation (The Ecologist, 1993; Sachs, 1993; de la Court, 1991), and an inappropriate response to environmental problems (Macnaghten et al., 1995). Shiva (1992) argues that the real meaning of sustainability, and by implication sustainable development, should elevate the goal of ecological stability, warning that production remains untouched by ecological principles and that economic wealth cannot recreate life once lost (ibid, 191-2).

Arguably, a global commitment to sustainable development was never intended to be a commitment to protect the global environment. Richardson (1997) argues that the Brundtland approach to the natural world frames human-centred programmes of economic growth in the language of environmentalism. International agreements on sustainable development unite governments and civil society in economic expansion without adversely affecting the environment (ibid). On the other hand, although environmentally weak, such commitments to sustainability have given citizens a weapon with which to hold governments accountable for their complacency in fulfilling international environmental agreements signed at the 1992 Earth Summit i.e. the Forestry Principles, the
Framework Convention on Climate Change, the Convention on Biodiversity, and the Convention on Desertification (Jacobs, 1999; Porritt, 1997).

2.1.2 Urbanisation

A dominant feature of developmental pressure and environmental change is the large-scale unsustainable process of urbanisation (Girardet, 2000). The now fulfilled prediction, that more than half the population of the Earth would be living in urban areas by 2006 (United Nations, 2004) was the subject of the 1996 UN City Summit in Istanbul. This global gathering resulted in the adoption of the Habitats Agenda, signed by 180 nations, which promotes the planning, development and improvement of human settlements in line with the principles of sustainable development.

Given some of the criticisms of the concept of sustainable development, it was the Habitat Agenda’s pledge to respect the carrying capacity of ecosystems that caught the attention of those seeking to protect the environment (Girardet, 2000). As Girardet concludes in a book intended to prepare environment and development lobbyists for the 10-year anniversary of the Earth Summit in Rio,

Eco-friendly urban development could well become the greatest challenge of the 21st century, not only for human self-interest, but also to create a sustainable relationship between cities and the biosphere.

(ibid, 211)
Jacobs (1999) points out that the transition toward sustainability, found difficult by those governance institutions tasked with the job, requires the merging of often dichotomous concepts such as individuality and community, local and global, and self and the biosphere. Such sustainable urbanisation reportedly suffers from the same conceptual problems as sustainable development, with planning circles either lacking in understanding or misconstruing the sustainability principle “as merely an environmental doctrine” (Basiagio, 1999: 149). There is no definitive definition of ‘sustainable urbanisation’ and few examples of human settlements embodying the principles of ‘urban sustainability’ (ibid).

However, sustainable urbanisation is not a new concept born of Rio. Urban planners, such as Magnaghi (2005), began writing on the sustainability aspects of urbanisation in the 1970s. As founder of the Italian Territorialist School, Magnaghi elaborated on the concept of sustainable development through the exploration of localised eco-development (ibid). In The Urban Village, Magnaghi details approaches formulated to understand models of human settlement (ibid). These range from the human-centred functionalist approach predicated upon environmental friendliness, where environmental limits to development are respected but the environment is conceptualised as ‘a beast of burden’, to the ecocentric approach that prioritises ecological sustainability (Shiva, 1992) and respects the earth (and/or Earth) as a living entity (Leopold, 1949; Lovelock, 1979).
Magnaghi (2005) also argues that *il territorio*, i.e. territory or human settlement, is a ‘neo-ecosystem’ – a product of nature and culture – with a life cycle of birth, death and rebirth. The organic metaphor of a city as a lifeform is often used to illustrate different cityscapes having different yet specific metabolisms (Wolman, 1965). For example, human settlements based upon lower thresholds of economic development, such as subsistence level farming, are characterised as retaining a circular and thus sustainable metabolism (Girardet, 2000). As urbanisation intensifies, the city’s metabolism becomes unsustainably linear with urban dwellers becoming further separated from the inputs and outputs of their neo-ecosystem (ibid, 205).

The European Commission’s *Thematic Strategy in the Urban Environment* promotes sustainable urban design to reduce the loss of natural habitats and biodiversity but does little to address the loss of humanity’s relationship with nature (European Commission, 2005). Beyond the physical resources issue of unsustainable living practices, there are ethical implications to the distancing of an increasingly urbanised human society from the natural world. Reminiscent of Rousseau (1712-78) with his romantic model of nature and the associated belief of an urbanised society as the imposer of artificial desires (Des Jardins, 2001), Light (2001) posits that the human / nature separation results in an environmental disvalue of urban habitats and the moral corruption of city dwellers. In a later paper, Light & Wallace (2005) claim that environmentalists see cities as antithetical or hostile to nature, with the life of a city dweller reduced to a plastic,
artificial existence (Rolston, 1988). However, Henwood & Pidgeon (2001) would argue that it is not solely environmentalists who feel cities are destroying nature. A survey of North Wales residents highlighted encroaching urbanisation as a threat to an otherwise unspoilt, pure, clean environment, soon to be replaced by “a dirty and insanitary” cityscape (ibid, 138).

Research into how city lovers and city loathers perceive so-called morally corrupt urban habitats in terms of behavioural incivilities, such as vandalism or impoliteness, found that urbanophiles (city lovers⁴) are more likely to “forget” ambient dirtiness and disrespectful behaviours than urbanophobes (city loathers²), who perceive the city to be a place of social coercion, stress and discontent (Félonneau, 2004). This suggests that those happy to live in the city have a higher tolerance for morally questionable behaviour, lending support to the hypothesis that an erosion of moral sensibilities occurs when humanity is separated from nature.

Félonneau’s findings (2004) correlate with Wilson’s biophilia hypothesis, which posits that people prefer natural environments to alternatives, such as cityscapes (Wilson, 1992). Many environmental ethicists and psychologists cite this popular hypothesis. For example, the biophilia hypothesis is cited by Noss (2004) to explain childhood fascination with non-human lifeforms, by Shearman (2005) to

---

⁴ An urbanophile is defined as holding pro-urban attitudes, valuing highly the urban characteristics of a place, whereas an urbanophobe would describe an Ideal City as free of urban characteristics such as cars, pollution, and violence (Félonneau, 2004: 44)
justify befriending the non-human world and by Light (2001) to provide insight in to the perceived moral corruption of urbanites.

Humanity is part of nature, a species that evolved among other species. The more closely we identify ourselves with the rest of life, the more quickly we will be able to discover the sources of human sensibility and acquire the knowledge on which an enduring ethic, a sense of preferred direction, can be built.

(Wilson, 1992: 348)

In other words, urbanisation distances humanity from its biophilic relations, resulting in a reduction in the complete set of values required to fully respect the neo-ecosystem within which the urbanite resides (Rolston, 1994). Furthermore, eco-friendly urban development cannot be achieved without an understanding of ecological principles to underpin humanity’s relationship with cities (Girardet, 2000).

Our separation from natural systems and our lack of direct experience of the natural world is a dangerous reality as it reduces our understanding of our impacts and of the ways in which we might lessen them.

( Ibid, 206)

Therefore, if urbanites are indeed morally corrupt, blind to incivilities and lacking values,

…only a profound change of attitudes – a spiritual and ethical change – … can ensure that cities become truly sustainable.

( Ibid, 211)
The value systems of urbanites are thus an important consideration in environment and development decision-making, and it is to these values and how they relate to a city dwellers worldview that we now turn.

### 2.2 The philosophical context of UWA protection

*A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.*

Leopold (1949: 262)

#### 2.2.1 Ethics and values

Environmental ethics is concerned with the moral norms that govern human behaviour towards the environment (Des Jardins, 2001) and is founded in the notion that morality should be extended to include the human / nature relationship (Kortenkamp & Moore, 2001). There is no singular environmental ethic but rather a number of environmental ethical theories offering different answers to questions of responsibility toward the natural world and the determination of which objects are morally considerable, i.e. worthy of concern, is informed by giving a full account of values (Des Jardins, 2001). Values are presumed by Braithwaite & Scott (1991),

... to encapsulate the aspirations of individuals and societies: They pertain to what is desirable, to deeply engrained standards that determine future directions and justify past actions.

(ibid, 661)
There is a strong relationship between values and normative commitments to environmental protection (Morito, 2003; O’Neill, 1992). For example, it has been shown that held values are a strong determinant of pro or anti-environmental action to problems that the subject may have little or no direct prior experience of (Stern & Dietz, 1994). Further, particular sets of related values held by an individual or society will inform the way they see the world and their responsibilities towards it (Axelrod, 1994; Schultz & Zelezny, 1999).

As indicated by the title, this research is concerned with one of the subset of non-economic values - namely ‘intrinsic value’. To determine whether urban residents recognise this particular value in a specific UWA, an exploration of the current literature on the definition, use and misuse of the concept of this most elusive of values is warranted - beginning with the related but contrastable instrumental value.

2.2.2 Instrumental value

Instrumental value is described as a function of usefulness (Des Jardins, 2001) i.e. that the object under consideration has a use (Rolston, 1992) or is a means to achieving a purpose of another entity (Lockwood, 1999). In environmental terms, instrumental value is attributed to items that have a use to human society – otherwise termed ‘resources’. For example, Gifford Pinchot, forester and one of the founding fathers of the US conservation movement, valued the forest
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instrumentally for “what it yielded for the service of man” (Pinchot, 1914: 13). Instrumental value is thus the primary value underpinning a human-centred or anthropocentric ethic.

2.2.3 Anthropocentrism

An anthropocentric ethic or worldview confers an indirect responsibility on humanity regarding the natural world, where the duty to preserve resources for the benefit of other humans is the primary responsibility (Des Jardins, 2001). Furthermore, anthropocentric environmental concern is based on the effects that environmental change will have on the quality of human life and is thus the basis of governmental obligations such as those contained in the UK strategy for sustainable development (see Section 2.1.1). According to Richardson (1997),

> The essence of the anthropocentric approach to the natural world is that humankind is above nature and has the right ... to subjugate it. 

(ibid, 44)

Social scientists investigating the correlation of value systems in relation to a guide for action have often separated anthropocentrism in to its ego-centric (self-centred) aspects and more altruistic socio-centric aspects (Merchant, 1992; Stern & Dietz, 1992). This distinction is important when discussing the subjectivity of value as it influences how individuals within particular cultures view their environment, be it urban or natural (Attfield, 2001). As Des Jardins summarises in An Introduction to Environmental Philosophy, there is a case to make that certain
cultures – particularly those with a Western philosophical tradition – are anthropocentric in their ideas on ethical responsibility to nature, thus providing both the individual and society with a rationale with which to exploit and dominate the natural world (2001: 95-103).

2.2.4 *Intrinsic value*

Environmental philosophers and ethicists have long sought to justify the non-use or ‘intrinsic value’ of nature (Goodpaster, 1978; Regan, 1981; Rolston, 1983; Pluhar, 1983; Callicot, 1985; Taylor, 1986; Haught, 1986; Johnson, 1992; Plumwood, 1993). Yet the term has come to have multiple meanings, sometimes within the same body of text! Although primarily used in contrast to instrumental value5, intrinsic value often describes non-use attributes such as beauty, harmony or spirituality (Leopold, 1966; Brady, 1998). These subjective forms of intrinsic value - including other ‘cultural values’ like historical, symbolic and authenticity value (Throsby, 2006: 43) - can be described as transient as intrinsic value of this type is dependent on a human valuer in a particular place and point in time. If natural heritage6 – for example a landscape or habitat – ceases to be considered culturally valuable or a society or individual loses interest in it, the object itself thus loses its subjective intrinsic value (Prior, 1998).

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5 see Section 2.2.2
6 Natural heritage is defined by English Heritage as “all inherited habitats, species, geology and landforms, including those in and under water, and their natural beauty and amenity” (English Heritage, 2006: 2)
The alternative objective definition, sometimes called ‘inherent worth’ (The Open University, 2002: 12), denotes that the object has value independent of the human valuer and is thus worthwhile in itself (Rolston, 1992). Taking O’Neill’s argument for the existence of a non-instrumental, non-relational, objective value in nature (O’Neill, 1992) together with Passmore’s idea of the indifference of nature towards human welfare, (Passmore, 1975), Hailwood (2000) concludes that the root of objective value may be found in the so-called ‘otherness’ of nature and is manifested in a respect for nature’s independence. However, a number of feminist thinkers may take issue with Hailwood’s subtly dualistic thinking which further reinforces the split between humanity and nature, and the domination of the latter by the former (Bookchin, 1982; Plumwood, 1992; Eckersley, 1992).

The defence of objective intrinsic value, especially in relation to nature has been “relegated to quiet corners” (Satterfield, 2001: 332) in order to avoid what Prior terms “philosophical derision” (1998: 428). Such derision often arises from the assertion that there can be no objective value independent of particular cultures or networks of perceived values (Attfield, 2001). According to Preston (2001) intrinsic value is comprehensible only when it is seen to emerge from an evolutionary and ecological narrative.

This axiological debate will no doubt continue within the journal pages of *Environmental Values* and the researcher does not here intend to settle this long running philosophical altercation. It is sufficient for the investigation at hand to
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presume that an anthropocentric ethic confers moral consideration on nature primarily on the basis of its instrumental value whilst ecocentrism is underpinned by a network of intrinsic values (Kortenkamp & Moore, 2001). However, this does not mean that an anthropocentric ethic necessarily excludes intrinsic value as, due to the implicit subjectivity of values such as beauty and tranquillity, some intrinsic values can be categorised as weakly anthropocentric.

2.2.5 Ecocentrism

The failure to disassociate intrinsic from instrumental value, and the further distinction between subjective and objective intrinsic value, led Gardner & Stern (1996) to conclude that there may be no widespread ecocentric orientation in Western culture (Lockwood, 1999). However, as Lockwood (1999) illustrates in his uniquely broad ranging study, which attempts to integrate the academic worlds of environmental psychology, philosophy and economics, the array of simultaneously held human / nature value positions is complex and subject to the misuse or misinterpretation of a number of key concepts.

For example, the terms ecocentrism and biocentrism are mistakenly used interchangeably (e.g. Schultz & Zeleny, 1999) whereas they are clearly separate concepts. Biocentrism is a life-centred ethic and a product of ethical extensionism underpinned by a belief in the intrinsic value of all lifeforms (Schweitzer, 1946; Goodpaster, 1978; Regan, 1981; Taylor, 1986). In contrast, ecocentrism recognises
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Intrinsic value in a broader set of objects that includes both the biotic and non-biotic elements of ecosystems, not just the individual inhabitants or species (Leopold, 1949; Lockwood, 1999).

Furthermore, according to Lockwood (1999) survey test scales used to categorise an individual’s value perceptions as anthropocentric, biocentric or ecocentric (e.g. Dunlap & Van Liere, 1978; Dreger & Chandler, 1993; Gagnon Thompson & Barton, 1994; Kempton et al, 1995) are often not designed to sufficiently distinguish between biocentrism and ecocentrism, whilst others are built on a flawed definition of the concept of intrinsic value (see Section 2.2.4 above). Lockwood’s (1999) identification of a mistaken conceptualisation of intrinsic value and ecocentrism led him to conclude that, rather than there being no widespread ecocentric orientation in Western culture (Gardner & Stern, 1996), there is in fact no psychometrically sound instrument with which to elucidate such an ecocentric orientation – a point we will return to in Chapter 4. First, however, the next section introduces the location where the current search for the ecocentric urbanite will take place.

2.3 The local example of UWA protection

The concerted protest against building in and around these woods has highlighted the need and desire to protect all that now remains of the Great North Wood.

L.S.C. Neville on Sydenham Hill Wood (1987)
2.3.1 Urban wildlife areas in London

In 2003 London had 3.1 million households (DCLG, 2006) covering approximately 1570 square kilometres (GLA 2003: 20-21). This is expected to rise to 3.9 million by 2026 within the same 33 London Boroughs (DCLG, 2006), an increase of over 25 percent. Within London’s boundary, there are currently approximately 543 square kilometres of greenspace, not including private residential gardens, allotments, cemeteries, school grounds or sports pitches, which if included in the calculations would push the area of metropolitan green space in London from one to two thirds of total land area (GLA, 2003). Therefore, it would appear that London has a large total area of green space, although it should be noted that this is not evenly spaced across all Boroughs (ibid).

As outlined in Chapter 1, as urbanisation increases the habitat available for indigenous wildlife decreases, either pushing it to the outer limits of human conurbations or isolating it in small remnant fragments of once larger ecosystems. However, amongst built up, densely populated, neo-ecosystemic urban areas, wildlife survives in little pockets of green space. Of particular importance to wildlife and humans is ancient woodland, both as a site of biological diversity and in terms of its longevity as a woodland. This is

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7 Based on data from the Department for Communities and Local Government (DCLG) derived from household projection models taken from the last four censuses; 1971, 1981, 1991 and 2001 (DCLG, 2006)
recognised in the national planning document *Planning Policy Statement 9: Biodiversity and Geological Conservation*, which states,

> Once lost [ancient woodland] cannot be recreated. Local planning authorities should identify any areas of ancient woodland in their areas that do not have statutory protection (e.g. as an SSSI). They should not grant planning permission for any development in that location that would result in the loss or deterioration unless the need for, and benefits of, the development in that location outweigh the loss of the woodland habitat.

(ODPM, 2005: 6)

Urban wildlife areas, such as ancient woodlands in metropolitan locations, can be afforded protection through a number of statutory protection schemes or ‘designations’, which include,

- Site of Metropolitan Importance for Nature Conservation
- Site of Borough Importance for Nature Conservation
- Site of Special Scientific Interest
- Local Nature Reserve

In the most recent review of England’s land use planning system by Kate Barker (2006), it is reported that,

> The goal of all aspects of planning is to create successful places where people want to work, shop, live or visit, where businesses flourish and where the natural environment is respected and enhanced. By mediating between

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8 See Section 2.1.2 for more on ‘neo-ecosystems’
conflicting interests and objectives through a democratic process planning can support economic success together with other sustainable development goals.

(Barker, 2006:1)

However, in later chapters of the interim report it is implied that designations intended to legislatively protect the natural environment are an obstacle to development planning, and more explicitly, to the goal of sustainable economic growth (ibid). As mentioned in Section 2.1.1 above, striking the most appropriate normative balance between the environmental, social and economic aspects of sustainable development continues to divide opinion both theoretically and practically, and this split is best illustrated by an example of local level development decision-making.

2.3.2 Sydenham Hill Wood

Much of what is known about the origins of Sydenham Hill Wood is found in L.S.C. Neville’s brief history of the Great North Wood, which gives a comprehensive account of the character, use and decline of the closest ancient woodland to Central London (Neville, 1987). Neville reports that over 10,000 years ago much of Southwark was covered in wildwood that was gradually felled for timber and to open the land up to farming. However, on the raised ridge of hills in the southeast corner of what is now the London Borough of Southwark, the misleadingly named Great North Wood was maintained to provide underwood and timber for the growing metropolis (LWT, 1996).
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Although not specifically named as a wooded commons in the Domesday Book of 1086, this area of London paid significant tax revenues on pigs and other animals grazed in wooded areas, a proxy indicator of uncultivated wooded pasture (Neville, 1987).

Appendix 1 indicates the size of the Wood from c1580 to the present day. The outer boundary of the chain of woodland remained as shown until the mid-18th century when the industrialisation of London brought with it the perception that common land was a major obstacle to agricultural progress (ibid). Within thirty years nearly three thousand acres of common held land from Croydon in the south to Lewisham in the north was enclosed and allotted to enterprising landlords who, through inexperience, went on to mismanage the coppice. Furthermore, as firewood was rapidly losing market value to replacement coal, landlords turned to selling off land for more profitable house or road building, or converting it to private golf courses for affluent London residents (ibid).

Sydenham Hill Wood thus survives as one of the last remaining fragments of this once expansive, ancient Great North Wood (The Wildlife Trusts, 2003). Hemmed in on all sides9, it continues to be encroached upon by the need for affordable housing within easy reach of the centre of London. The current landowner – Dulwich Estates – last built houses on a number of neglected coppices after the Second World War (Neville, 1987). In 1968 and again in 1979, Southwark Council

9 See Appendix 2 for aerial photographs of Sydenham Hill Wood from a number of altitudes.
bought leases for a section of neglected coppice - now known as Sydenham Hill Wood - and set out to build a number of housing estates. In 1985 these plans were halted by a campaign supported by 3,300 local residents (LWT, 1985) and the London Wildlife Trust, resulting in a public inquiry and a ten-year moratorium on development (ibid).

This safe haven for flora and fauna was sub-leased in 2003 from Southwark Council for a period of twenty five years by the London Wildlife Trust, whose primary objective is to manage land as nature reserves to protect wildlife (The Wildlife Trusts, 2003). It is further defended from development through its designation as a Local Nature Reserve (LWT, 1996) and a Site of Metropolitan Importance for Nature Conservation (GLA, 2003). It is home to a combination of ancient oak and hornbeam together with more recent woodland, as well as ponds and grassy glades, supporting over 70 species of bird, 200 plant species and 200 species of fungus (LWT, 1996).

According to Waite (1998), London is home to many species protected under the Wildlife and Countryside Act (1981). This Act protects wildlife on both a species basis and through the designation of statutory protected areas (ibid) although for reasons unknown, the London Ecology Unit did not appear to have surveyed the London Borough of Southwark in its 1998 survey of scheduled protected species. However, this wooded area of London is known to be a hotspot for one of
London’s most important protected invertebrates - *Lucanus cervus* - otherwise known as the stag beetle (The Wildlife Trusts, 2003; Waite, 1998).

### 2.4 Summary findings of state-of-the-art review

It appears from the state-of-the-art review that urban wildlife areas - such as Sydenham Hill Wood - are institutionally valued in terms of ecological significance through their designation as statutorily protected areas under the Wildlife and Countryside Act (1981). Furthermore, there exists an international dimension to the protection of local non-human habitat in terms of the obligations signed up to at the 1992 Earth Summit by national Governments, demonstrated in the UK by the Government’s 1999 commitment to the electorate to develop the UK in a sustainable manner. Examples of unsustainable land use development decisions are best illustrated at the local level, as is shown by the historic case of Sydenham Hill Wood in Southwark.

Due to a combination of attractive economic incentives, i.e. short-term profit, and the pressure of urbanisation, some of the oldest woodlands in London have been irreversibly lost. Yet, the continual threat of erosion of green space has not gone unnoticed by local residents. Reportedly, many local residents valued the site highly enough to become involved in the most recent campaign to halt further development of this ancient woodland (Neville, 1987).
As the value systems and worldview orientations of those involved in the campaign and resultant public inquiry were not recorded at the time, it is the researcher’s intention to investigate which of the values described in Section 2.2 underpin the worldview orientation of current local residents living near Sydenham Hill Wood, and to discover whether there ecocentric urbanites are resident near this institutionally and locally protected site.
Chapter 3: METHODOLOGY

3.1 Choice of sample set and research methods

Study participants are not especially good at, or not given the chance of, giving voice to values that are ethically-charged, deeply held, privately defended or not available to consciousness at a moments notice.

(Satterfield, 2001: 331)

This chapter explains how the researcher set out to use both quantitative and qualitative research methods to elucidate the philosophical underpinnings of a particular group of urban residents’ attitudes to their local environment. Grounded in the discipline of philosophy, and also arguably in psychology, this research uses as an indicator of environmental ethic the recognition of intrinsic value. As discussed in Section 2.2.4 above, recognition of intrinsic value in nature is taken to indicate an ecocentric disposition and it is this set of values, and in particular those classified as objective intrinsic values, which differentiate an ecocentric from an anthropocentric worldview orientation.

In order to reduce significantly the probability of economic discrimination, e.g. an inability to meet the costs of travel to and from site or entrance fees, it was decided that a UWA case study would need to have open access. The longest established open access UWA in close proximity to the centre of London was
found to be Sydenham Hill Wood in Southwark (see Section 2.3.2) and a set of urban residents living close to the wildlife area was thus chosen.

It has been noted that although environmental valuation has traditionally been dominated by a quantitative economic approach (Henwood & Pidgeon, 2001), there exist a number of qualitative valuation studies that focus on specific sites or types of environment. These were often either commissioned or reviewed by government agencies\textsuperscript{10}, or by land owning non-governmental organisations such as The National Trust (1999) or The Woodland Trust\textsuperscript{11}. This investigative search for the ecocentric urbanite would take place in the context of a specific environment type, i.e. in relation to the Woods being an institutionally protected UWA, using a combination of methods in two separate but consecutive stages.

To narrow down the search for likely candidates and to focus attention on individuals fulfilling the required set of criteria (see Section 3.3), the researcher first employed a short semi-quantitative survey to screen urbanites in the Woods for potentially ecocentric orientations (Phase One). A qualitative method was then used (Phase Two) to capture the recognition of value in nature of the most ecocentric subset of Phase One participants.

\textsuperscript{10} See Rohde & Kendle (1994) for a review of published research.
\textsuperscript{11} in conjunction with CABE Space (2007)
3.2 Phase One

In similarity to research by a number of environmental psychologists in the field of environmental perception (e.g. Bogner & Wiseman, 1997; Henwood & Pidgeon, 2001), Phase One involved a simple survey to elucidate the environmental attitudes of a random selection of local residents visiting Sydenham Hill Wood. The attitudinal scale aimed to classify a participant as positioned predominantly within an anthropocentric or ecocentric worldview orientation, with the former emphasising the exploitation of natural resources for human benefit and comfort, whilst the latter includes altruistic principles of stewardship and conservation of nature as well as an objective respect for nature’s independence (see Section 2.2.4). The survey questions used to classify attitudes to the environment were those developed by Dunlap, Van Liere, Mertig & Jones and named by the collaborative authors ‘The New Ecological Paradigm Scale’ (Dunlap et al, 2000).

3.2.1 The New Ecological Paradigm Scale

A product of a Washington State-wide study into the general public’s worldview orientation, the precursor to the New Ecological Paradigm (NEP) scale was devised and published by Dunlap & Van Liere in 1978. In essence, measurement of an individual’s worldview orientation against the NEP scale – or what was then named the New Environmental Paradigm scale – gives an indication of
whether that individual has an environmental or anthropocentric view of the world. Through a series of closed questions, the participant focuses on their beliefs regarding humanity’s ability to upset the balance of nature, the existence of limits to growth for human societies, and humanity’s right to rule over the rest of nature. People’s attitudes towards the three facets of the social paradigm (of the 1970s) were thought to dichotomise into either the Dominant Social Paradigm, with its anti-environmental thrust (Pirages & Ehrlich, 1974), or the New Environmental Paradigm (NEP), which calls into question humanity’s destructive relationship with nature.

The current NEP scale consists of fifteen items designed to tap “primitive beliefs” about the relationship between humans and the environment (Dunlap et al, 2000: 427). The participant is asked to rate, on a sliding or Likert scale, their agreement with statements, from *strongly agree*, through *mildly agree* and *mildly disagree* to *strongly disagree*. Strong agreement with a pro-environmental statement scores high whilst strong agreement with an anti-environmental statement scores low. The NEP score is then calculated by adding up scores to each question to give an overall tally. Put simply, the higher the score, the more pro-environmental the participant.

Dunlap & Van Liere (1978) discovered through studies of interest groups and environmental organisations, that known environmentalists consistently score higher on the NEP scale than non-environmental interest groups or members of
the general public, leading the authors to claim that the NEP scale had known-group validity and thus criterion validity. However, since its conception in 1976, the NEP scale has been both commended and criticised as an effective tool to measure society’s environmental attitudes (see Section 2.2.5).

The earlier version is criticised as inadequately distinguishing between the differing depths of ecological thought (Lockwood, 1999) and lacking in anti-NEP terminology thus tilting the playing field towards the pro-environmental end (Green & Citrin, 1994). Thus, in 2000 the NEP scale items were updated to accurately reflect the environmental social paradigm of the 21st century, and renamed the New Ecological Paradigm Scale (Dunlap et al, 2000).

Although updated, the criticism regarding the distinction between biocentrism and ecocentrism remains. However, the new NEP scale items now reflect a balance between pro and anti-NEP statements. Box 1 shows the five facets of the NEP according to Dunlap et al (2000), whilst Appendix 3 shows the full 15 NEP scale items as they appear on the survey forms used in Phase One of this research. Eight of the fifteen items are worded such that agreement indicates correlation with the NEP and thus a pro-environmental or pro-ecological worldview. Conversely, disagreement with the remaining seven (even-numbered) items also indicates correlation with the NEP.
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Five facets of the New Ecological Paradigm

The reality of limits to growth

Anti-anthropocentrism

The fragility of nature’s balance

Rejection of human exemption from nature’s processes

Possibility of an ecological crisis

Box 1. Five facets of Dunlap et al’s (2000) updated NEP scale items

3.2.2 Use of NEP in Phase One

In order to identify a suitable sample set with which to investigate the recognition (and articulation) of intrinsic value of an UWA, namely Sydenham Hill Wood - hereafter called ‘the Woods’ - the researcher decided to first screen potential participants for their worldview orientation prior to Phase Two. Assuming that the more intangible and difficult to articulate values are most likely to be recognised by those displaying pro-environmental tendencies, and that a high NEP score indicates a pro-environmental / ecological outlook, the NEP scale - hereafter called ‘the survey’ - was used to identify those survey participants best fitting the description of ecocentric urbanite. Those displaying the highest survey scores were then invited to participate in Phase Two (see Section 3.3.1 below).
On four Wednesdays and Sundays in late Summer 2006, visitors to the Woods were approached whilst walking and asked to take part in a short survey. The short one-page surveys were distributed and collected by London Wildlife Trust (LWT) staff and volunteers, and by the researcher. Almost all volunteers also took part in the survey, indicating their status on the form to allow later identification between visitors and volunteers.

Nearly everyone asked to complete the survey were happy to do so with only one or two refusing as they were pressed for time. All participants were given a few minutes to complete the survey themselves, with one exception requesting the questions be read to them, as they did not have their reading glasses. A total of 105 surveys were returned - 94 visitors and 11 volunteers. Only one survey was disqualified due to the participant having already taken part earlier in the day. The full survey is shown in Appendix 3 and a copy of the information letter provided to LWT volunteers is shown in Appendix 4.

3.3 Phase Two

On completion of Phase One, the NEP scores of all survey participants were ranked in descending order with the top twenty highest scores further subdivided into a sample set of participants that a) lived within an approximate five mile radius of the site and b) did not have a second home in a rural location. These criteria were set to allow survey participants to be filtered in to an 'urban
resident’ category, i.e. those who spent the majority of their time residing in an urbanised South London area. Once this subset of potential ecocentric urbanites had been identified, the researcher attempted to contact those participants that had indicated their willingness to be interviewed, to invite them to take part in a short semi-structured interview on their relationship with their local environment.

Of the top twenty NEP scores, ten had indicated on their survey form their willingness to be interviewed. Of these ten willing participants, one was disqualified for multiple survey submissions (see also Section 3.2.2), two were un-contactable on the telephone numbers or email addresses given, and two withdrew their willingness to participate, leaving a shortlist of five participants, all of whom were willing LWT volunteers. As these remaining participants with survey scores at the pro-environmental end of the NEP scale were volunteers in the Woods, this indicated a high probability that a group of potential ecocentric urbanites could be found amongst the other LWT volunteers. Phase Two was thus taken forward with the group of LWT staff and volunteers who, as they regularly worked in the Woods, had helped administer Phase One of the study, and who met the urban resident criteria.
3.3.1 Use of semi-structured interview to elucidate value recognition

When questioned people often respond rapidly with what they think they ought to say rather than how they may truly feel on reflection. Consequently, although participants may have scored highly on the NEP scale, a semi-structured interview focusing on the locally applicable aspects of the NEP survey statements gives the potential ecocentric urbanite time and space to reflect, expand and perhaps even contradict the “primitive beliefs” originally elicited by the survey.

The interview appointments were arranged to coincide with the voluntary workdays at the Woods. As the value of UWAs was to be the primary topic of conversation, it was important that the interview took place in the Woods rather than by telephone or in an otherwise ‘non-UWA’ environment. Each approximately thirty minute interview was guided by a set of eleven key questions (reproduced in Appendix 5) designed to take the participant through their practical, personal and historical relationship with the Woods, moving on to questions regarding their recognition of subjective intrinsic value, and finishing with the participants’ attempt to articulate an example of an objective intrinsic value. All interviews were audio recorded, with permission of the participant, and later transcribed for ease of analysis.
3.3.2 Analysis of qualitative data

Throughout the state-of-the-art review, and in particular during the investigation into the philosophical context of UWA protection (in Section 2.2), the researcher employed methods of data analysis to code materials gathered. Initial use of open coding, through axial coding to the most systematic methods of selective coding (Strauss, 1987) revealed core categories in to which values ascribable or recognisable in nature could be classified – i.e. instrumental, intrinsic, subjective, objective, etc. In addition, writings by Bogner & Wiseman (1997), Felonneau (2004), Henwood & Pidgeon (2001) and Satterfield (2001) were selectively coded to distil a list of categorised values against which the transcripts of interviews could then be compared (see Table 1 below).

Okely (1994) cautions against the taking for granted or the rigid prearrangement of a classification system for qualitative data. However, Table 1 is not a rigid template against which any previously unidentified values should be discounted. Rather, prior recognition by the researcher of certain linguistic expressions or groupings of values aided the semi-structuring of the interview process. Furthermore, knowing how others articulate the intrinsic value of nature helped signpost the researcher throughout the research process particularly during the collection of category specific qualitative materials prior to Phase Two.
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<th>Values</th>
<th>Anthropocentric</th>
<th>Ecocentric</th>
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<td>Intrinsic</td>
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<td>Ecological sustainability</td>
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<td>Complexity</td>
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<td>Existence</td>
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<td>Community (biotic)</td>
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<td>Wilderness</td>
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<td>Biodiversity/wildlife/species</td>
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Note: Categorisation is made by the researcher and is therefore open to interpretation.
Chapter 4: RESULTS

4.1 Phase One

The 105 New Ecological Paradigm (NEP) survey results were calculated in the order they were collected and then analysed in two distinct categories: visitors to the site and volunteers of the site. To indicate the overall array of NEP scores received against the possible range, Figure 1 shows a graphic representation of all data collected during Phase One. In the following sections, the results of each category are reported separately, compared and contrasted with each other, and also compared with data obtained by Dunlap et al (2000).

![Figure 1](image)

**Fig 1.** Chart to show the frequency distribution of all NEP scores obtained during Phase One. Note: Visitors’ scores are shaded grey and volunteers’ scores are shaded red.

4.1.1 Visitors’ NEP survey results

Each of the 94 visitors’ surveys were scored, summed and then categorised according to their correlation with the NEP. Box 2 indicates the NEP survey score
ranges from weak correlation, through inconclusive, to strong correlation with the NEP (according to Dunlap et al., 2000).

**NEP score ranges**

15 – 30  Weak correlation with the NEP indicating a non-ecocentric ethic and alignment with an anthropocentric worldview orientation.

31 – 59  Inconclusive correlation with the NEP indicating a combination of ecocentric and anthropocentric worldview orientations and/or indecision.

60 – 75  Strong correlation with the NEP indicating a non-anthropocentric ethic and an alignment with an ecocentric or pro-environmental worldview orientation.

**Box 2.** New Ecological Paradigm survey score ranges. Adapted for purpose by researcher from method developed by Dunlap et al (2000).

The lowest visitor score recorded was 40, which according to Box 2 indicates the participants holds no conclusive worldview orientation. The highest visitor score recorded was 75, which is the highest score possible (see Fig. 1) and indicates the participant holds an ecocentric or pro-environmental worldview orientation. The arithmetic mean of visitors’ scores was computed to be the same as the median average of 58, therefore indicating that visitors to Sydenham Hill Wood, on average, do not conclusively hold an ecocentric environmental ethic. As indicated in Figure 1, no visitors fell in the non-ecocentric / anthropocentric orientation category, i.e. scored 30 or less.
The majority of visitors (62%) exhibited a combination of environmental ethics (see Section 2.2) and thus could not be categorised as predominantly pro or anti environmental. In other words, individual visitor participants gave both anthropocentric and ecocentric answers, which when scored and summed, averaged to give a tally in the ‘inconclusive’ range (i.e. 31 – 59). However, 38% of visitors did exhibit strong non-anthropocentric tendencies towards the environment and could therefore be classified as ecocentric urbanites.

**Fig 2.** Chart to show the frequency distribution of visitors’ NEP scores.

Figure 2 shows a graphical representation of the distribution frequency of visitors’ NEP scores across the range of results received. Those shaded blue are inconclusive NEP scores whilst those shaded green indicate a strong correlation with an ecocentric worldview orientation. The trendline indicates the majority of scores are clustered around the average score (58) with outliers at each end of the received scores slightly distorting an otherwise normal, bell-shaped distribution.
In order to illustrate the comparative frequency distribution of visitors’ NEP survey responses in comparison to those obtained by Dunlap et al in their study undertaken in Washington State (Dunlap et al, 2000), both sets of numerical data are charted together in Figure 3 below. Although the Dunlap study (D) surveyed a total of 676 people in comparison with a much smaller total of 94 visitor participants in Phase One (JB), the chart does show a very similar pattern of comparative frequency distribution for almost all item responses. It is also noted that the majority share of both sets of percentage distributions lie to the right of the vertical (y) axis, indicating an overall skew toward ecocentric worldview orientation. However, without Dunlap et al’s original data sets of individual participants, it is not possible to calculate and compare the frequency distribution of worldview orientations, as presented in Figures 1 and 2 above.

4.1.2 Volunteers’ NEP survey results

The 11 volunteers’ surveys were scored, summed and then categorised according to their correlation with the NEP. The lowest volunteer score recorded was 48, indicating the participant holds no conclusive worldview orientation, and the highest volunteer score recorded was 73, indicating an ecocentric or pro-environmental worldview orientation. The full array of individual volunteer scores is shown in Figure 1 above (shaded red). The arithmetic mean of volunteers’ scores was calculated to be 63 whilst the median average equalled 64.
Therefore, on average, the LWT volunteers surveyed at Sydenham Hill Wood hold an ecocentric environmental ethic. No volunteers fell in the non-ecocentric / anthropocentric orientation category and the minority of volunteers (27%) answered with a combination of environmental ethics, which categorises them as neither pro nor anti environmental in their worldview orientation. The majority of volunteers (73%), however, exhibited a strong non-anthropocentric worldview orientation and are thus classified as ecocentric urbanites.

Figure 4 below shows the comparative frequency distribution of volunteers’ NEP survey responses in comparison to those obtained by Dunlap et al (2000). The graph shows a similar pattern of comparative frequency distribution for most item responses, resembling a similar right-sided, thus ecocentric skew, to that shown in Figure 3. However, volunteers tend to give a stronger indication of environmental ethic than those in the Dunlap study, which is denoted by the longer dark coloured bars in Figure 4. The volunteers consistently indicate they ‘strongly agree’ or ‘strongly disagree’ for the majority of item responses whereas in the Dunlap study, the frequency distribution is spread across the spectrum of possible answers. This strength of the volunteers’ decisions result in a definitive indication of environmental ethic toward the majority held non-anthropocentric / ecocentric worldview orientation.
Fig 3. Chart to show the comparative frequency distribution of visitors’ NEP survey responses (JB) against those obtained in the study by Dunlap et al in 2000 (D).
Fig 4. Chart to show the comparative frequency distribution of volunteers’ NEP survey responses (JB) against those obtained in the study by Dunlap et al in 2000 (D).
4.1.3 Comparative statistical analysis

Using the computerised statistical analysis package SPSS, an independent samples t-test was performed on the NEP survey score data to investigate the relationship between the mean averages of each sample group. By running a simple statistical calculation, the probability that the volunteers’ consistently higher scores in the NEP survey being down to random chance could be ascertained.

Results of the t-test showed a significant between-group difference (t=−2.34, p=.02) such that there is only a 2% probability that volunteers were scoring higher than visitors by random chance. It is perhaps unsurprising that those who work either professionally or voluntarily would consistently score higher in NEP test, to which we return in Chapter 6. However, on a cautionary note, it should borne in mind that there is a large difference in the comparative size of the data sets, i.e. 94 visitors compared with 11 volunteers. To improve the confidence of the statistical results it would be advisable to replicate tests on larger more comparative sample sets. It should also be noted that although it has been shown to be statistically significant that volunteers obtain higher NEP scores, this result should not be used to generalise. Further NEP surveys would be required at a variety of locations in order to ascertain whether this pattern is consistent across the UK. Setting aside this caution, and regardless of mean average scores or methodological improvements, the comparative distribution charts (Figs 3 & 4)
appear to indicate a general skew across all sample data sets analysed, toward a pro-environmental worldview orientation, which supports conclusions by Dunlap et al (2000)\(^\text{12}\) that a generalised endorsement of the New Ecological Paradigm is increasing.

4.1.4 *The indecisive urbanite*

Although results from both sets of Phase One participants give a clear indication of their average predominant worldview orientation, it should be noted that the survey form (in Appendix 3) gave the option to indicate indecision in response to any of the fifteen NEP items by selecting ‘unsure’. Where the participant failed to indicate a preference – often termed a ‘non-response’ – this was taken by the researcher to indicate indecisiveness and an ‘unsure’ response was awarded by default. This is in contrast to the Dunlap study, which noted and factored for non-responses in the total number of responses per NEP item. Therefore, in order to make the Dunlap study data comparable with Phase One data, the original Dunlap ‘unsure’ frequency responses were recalculated to award all non-responses with a default ‘unsure’ response.

Figure 5 below shows the comparative percentage of ‘unsure’ responses per NEP item between visitor participants (JB – Viz), volunteer participants (JB – Vol), and those who took part in the Dunlap et al study in 2000 (D).

\(^{12}\) See *Trends in Endorsement of NEP Beliefs* in Dunlap et al (2000: 437-8)
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Fig 5. Chart to show the comparative percentages of total ‘Unsure’ responses to NEP items between both Phase One sample sets and the Dunlap study (2000)

The chart indicates a similarity between the percentage of total ‘unsure’ responses given by the visitor participants (green) and those of the Dunlap sample set (blue), with 11 out of 15 unsure response rates within five percent of each other. This is in contrast to the volunteer participants who consistently show a lower unsure response rate except for Item 4, the wording of which many respondents expressed trouble understanding.

4.2 Phase Two

To narrow down the search for the ecocentric urbanite, Phase Two concentrated solely on participants that exhibited ecocentric tendencies in Phase One. Given that 73% of the volunteers polled, as opposed to 38% of visitors, expressed a strong correlation with the New Ecological Paradigm, i.e. NEP scores above 60 (see Box 2), and that LWT volunteers were available for interview, Phase Two
was conducted with the highest scoring, urban resident, LWT volunteers. This equated to a total of 8 adult individuals: 5 females and 3 males. Additionally, in order to follow a line of investigation on gender related differences in environmental value recognition, the researcher interviewed an additional male volunteer, although he originally scored below the ecocentric threshold in Phase One. Unfortunately, time constraints curtailed this avenue of gender related research, however, some of the additional participant’s comments have been included in Phase Two results, particularly where intrinsic value recognition was identified.

4.2.1 Full spectrum value recognition

As stated in Chapter 3, prior recognition by the researcher of certain linguistic expressions or groupings of values aided the semi-structuring of the interview process. Knowing how others articulate their perception of intrinsic value of nature signposted the researcher throughout the data collation process and helped focus the exploration of participants’ answers to open interview questions. The writings of Bogner & Wiseman (1997), Felonneau (2004), Henwood & Pidgeon (2001) and Satterfield (2001) were used to compile the primary list of values against which transcripts of interviews were compared (see Chapter 3, Table 1). This list was subsequently amended in light of actual values expressed by Phase Two participants.

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13 Item 4 reads “Human ingenuity will ensure that we do NOT make the earth unliveable”
The analysis of nine interview transcripts resulted in the removal, addition, and amalgamation of a number of possible values extracted from the four aforementioned selected writings in order to devise a list of the total spectrum of values recognised by Phase Two participants.

Of the values removed from the list in Table 1, most were anthropocentric values unrelated to the small urban site under investigation, such as ‘pharmacy’ and ‘timber’ value. Of the ecocentric values in Table 1, those that alluded to ‘ecological sustainability’, ‘complexity’ or ‘oppositional forces’ were not offered up by any of the participants, whereas expressions of value not previously noted by the selected authors included ‘recognition of life’, ‘continuity’, and ‘biophilic connectedness’, explorations of which will be returned to in Section 4.2.2.

During transcript analysis, each value was noted only once even though participants often alluded to the same value in answer to more than one question. On occasion, the researcher had to infer from a long circuitous segment of text a particular value the participant had attempted to articulate. However, wherever possible verbatim values were sought to reduce any misinterpretation of meaning. Table 2 below shows the full spectrum of values expressed during Phase Two interviews against a descending frequency matrix of individual participant recognition.
Of the possible values listed in Table 2, most participants articulated a full spectrum total (FST) of between 14 and 23 values, with ‘full spectrum total’ indicating the number of environmental values articulated to a maximum of 30,
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ranging from strong instrumental (anthropocentric) value to objective intrinsic (ecocentric) value. As 23 of the 30 environmental values articulated by participants had been previously classified as subjectively and / or objectively intrinsic (see Table 1), it was possible to calculate and compare each participant’s FST with their ‘intrinsic value total’ (IVT). Table 3 summarises the scores of each participant obtained during Phase One and Phase Two in the search for the ecocentric urbanite.

<table>
<thead>
<tr>
<th>Scores</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase One:</td>
<td>1</td>
</tr>
<tr>
<td>NEP survey</td>
<td>69</td>
</tr>
<tr>
<td>Phase Two:</td>
<td></td>
</tr>
<tr>
<td>Full Spectrum Total (FST)</td>
<td>22</td>
</tr>
<tr>
<td>Intrinsic Value Total (IVT)</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 3. Summary of Phase One and Phase Two scores for each interview participant. Highest scores shaded.

Not surprisingly, the highest FST score was obtained by the Site Manager of the Woods, who is arguably professionally tasked with recognising the broadest and most diverse spectrum of possible environmental values ascribable to an urban wildlife area. Participants expressing the top three FST scores (23, 22, and 20) also expressed the top three intrinsic value totals (IVT) of 19, 16 and 17, respectively.

A strong correlation between an individual’s NEP score and their IVT score was expected, given that both the recognition of intrinsic value of nature and a high

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14 IVT is the total number of intrinsic values articulated by participants (maximum 23).
NEP score are indications of an ecocentric worldview orientation. However, the participants with the highest NEP scores were not found to express the highest IVT scores. This may be due to non-comparability between the five facets of the New Ecological Paradigm (Box 1) and the intrinsic values recognised by participants, thus making any relationship of NEP to IVT spurious. Interestingly, the additional participant who had originally scored below the NEP ecocentric threshold in Phase One (55) expressed the third highest full spectrum total (20), the majority of which (17) were ecocentric in orientation.

4.2.2 *Intrinsic value recognition*

Phase One results indicate that 73% of Sydenham Hill Wood’s volunteers meet the criteria of ‘ecocentric urbanite’ as they conclusively and consistently agree with statements indicating pro-environmental / anti-anthropocentric worldview orientation. It has also been argued (in Chapter 2) that networks of intrinsic value underpin an ecocentric worldview orientation. For this reason, Phase Two set out to investigate the recognition of intrinsic value of the chosen institutionally protected urban wildlife area by the identified set of ecocentric urbanites. Of the 23 intrinsic values recognised by participants\(^\text{15}\), 10 are classified (by the researcher) as examples of ‘objective intrinsic value’. Explanations of, and associated empirical data for, each type of value will now be presented, with all quotes taken directly from participants’ transcripts.

\(^{15}\) See Tables 1 & 2
a) Existence

Existence value is linked to the retainment of opportunity, for oneself or others, to experience subjective intrinsic values such as peace, beauty and tranquility, or to pursue recreational or educational activities. For example, when asked if the site could be bulldozed over if humans ceased to visit it, one participant answered, “...alot of people enjoy it and would miss if it wasn't here”. Most, however, responded that the site has a need to exist and a right to do so, as if were an entity in itself. Beyond plants and animals having “a chance to exist”, the site “needs to exist on its own, by its own, [and] doesn’t have any reason not to”. It “stands in its own right”. Although one participant felt that the site “had as much right as us to exist”, suggesting a human / ecosystem equality of moral considerability, most expressed a form of biocentric altruism whereby the site is identified as having “habitat value for wildlife” or is of “value to birds ... even if no-one is interested in the birds or the trees”.

A good example of objective intrinsic value of an existence type was given by a participant who at the time was trying to explain why native species were more important than non-native species, many examples of which were introduced to adjacent gardens by the Victorians. During the battle to constrain the colonisation of the Woods by these often invasive plant species, e.g. rhododendron, a small patch of native wood sorrel had become “incredibly important” to one volunteer.
She explains that,

“I know there’s a bit of wood sorrel up there on the damp slope ... I don’t go up there very often as I don’t want to trample. That’s incredibly important to me. Somewhere near me there is one of my favourite plants and it’s wild!”

The same participant gave another example of existence value, where again, direct experience was secondary to the importance of knowing the thing – in the next case a frog – existed.

“Sometimes if things ... aren’t going too well, I think of something very simple. Like I think, there is a frog in my pond. And that frog is alive and it has intrinsic value that’s nothing to do with me, and has nothing to do with people ... and nothing to do with the twenty first century urban life. It is itself.”

b) Community (biotic)

The biotic community denotes the ecological web found in a particular place and time. It includes all interconnected components, both living and non-living, e.g. deadwood and soil, as integral components of the biotic community’s complex assortment of life cycles. Wherever participants expressed the Wood’s current collection of ‘interconnected’ flora, fauna, and abiotic components, this was taken to indicate recognition of the intrinsic value of biotic communities. Over half the participants alluded to this type of value although it was never expressed ad verbatim. For example, one participant commented on the fact that “things are left to fall off and rot, so it’s a very important habitat for insects and birds and things like that”. He went on to explain that although “people’s gardens are very good
for biodiversity” the nature reserve is “an intensive incubator for wildlife” and “a very important space for creating a wide biodiversity”. The recognition of intrinsic value of biotic communities is closely linked to one of the additions to the value list – the recognition of life.

c) Recognition of life

Although many expressed a biophilic connectedness whilst on site, to which we will return to in Chapter 5, almost everyone interviewed recognised the site as a place where non-human “species thrive” or as a “breeding place” for specific species, such as bats. The Woods as a whole were also described as “an oasis”, “a refuge for wildlife”, and “a cover, a security, for beasts and birds”. A participant who had only recently begun working voluntarily in the Woods gave the example that best explains this recognition-of-life value. When asked how she would describe the site to someone who had never visited before, she responded:

“You can sort of almost feel the whole thing breathing as opposed to when you are outside of the Wood and it’s all concrete and roads. You can feel that there’s life here.”

In contrast to recognising life whilst in the presence of individual species, this conception of value is perceived as being an attribute of the site as a whole. Moreover, the above-quoted participant felt this presence of life “energised” her. Here, however, this intrinsic value becomes connected to human health and wellbeing and hence subjective, rather than remaining a universal value
recognisable by all species that have the ability to distinguish the living from the dead.

d) Wilderness

This is another intrinsic value that is found to be both objective and subjective. Objectively, the UWA can exist outside of human judgement as a “rough and ready”, “uncontrolled” and “unmanaged” place. Yet, this value is also subjective in terms of the human conception of how wild places have the power to make us feel “vulnerable” and “isolated” with “the danger that nature’s there and could come up and snap at your heels”. In the case of this small UWA, a sense of wild is recognised in contrast to the “well ordered”, “controlled”, “concrete jungle” outside the Woods. This wildness is also described in contrast to the “packaged” and “promoted” green spaces where nature is secondary to “someone else’s view of what ... should be provided for ... my leisure”, e.g. council run parks with badly sited amenities.

e) Ecological heritage

Less than half of those interviewed cited ecological heritage as an intrinsic value of the site, whereas over half mentioned anthropogenic heritage, possibly as a result of the Woods once having a railway line running through the middle of them, leaving behind a stunning piece of architectural heritage - an enormous brick built tunnel. However, of those who did mention ecological heritage,
almost all noted the site’s status as an ancient woodland. For example, when asked to explain the site’s natural heritage, the Site Manager responded:

“It’s partly ancient woodland, in that there’s always been woodland here … [and] you can’t recreate an ancient woodland and its ecology”

This irreplacibility and sense of continuity from the past is further illustrated by the following example of wildflower theft.

“Those primroses were never planted. They must have been descendents of very early primrose. They date back to when the last ice age ended and England was forested … People dug up most of our primroses … I should think to flog them down the market for fifty pence a time … They were the ecological survivors of something incredibly precious and round here, very rare”

f) Continuity

A line of continuity stretching from its origin in the past, through its ecological heritage to the present, and on to an indeterminate point in the future is perceived as a value closely connected to concepts of irreplacibility and “uniqueness”. As illustrated in the wildlife crime example above, this continuum can be contextualised in a combination of genetic lineage and geographical terms. For example, when asked what made the site worthy of protection, many participants felt its identity as one of the last remaining fragments of the Great North Wood was of intrinsic value.
“This area used to be the Great North Wood [which has been] eroded away... It’s unique to have this type of site and environment in this location, in a big city.”

“It’s quite a small area of wood left over from the Great North Wood. There’s not a lot of it left now and that makes it special”

g) Recovery (bioregeneration)

There are two types of recovery value listed in Table 2 - bioregeneration and bioremediation. The latter relates to the recovery of the environment from anthropogenic ecological disasters such as pollution incidents, involving the use of particular species to actively remediate the environment. Bioregeneration, however, is an ecological recovery whereby ecosystems re-colonise or proliferate in a once barren area. For example:

“There are elements in this woodland where it has re-colonised, like this railway line”

Many participants expressed the sense that nature, if given the chance, would “spread out into the city as a whole”. For example, when asked if there were any threats to the Woods, one participant explained that:

“All manner of things could go wrong ... various ecological catastrophes ... some sort of catastrophic plague that would leave all of London going wild... If you had a drastic collapse of the population ... a situation a bit like Roman towns when the Roman Empire collapsed ... nature would take over”
Another participant, when asked if they saw nature as resilient to what they had earlier described as “some catastrophic end-of-the-world-is-nigh sort of scenario” answered,

“It will be the cockroaches and the weeds that’ll do the best. It’ll always find a way to get by … [and] if you take humans out of the equation it’ll obviously do a lot better”

h) Biodiversity / wildlife / species

Not surprisingly, everyone interviewed mentioned certain important species, biodiversity as a whole, or the presence of wildlife as an intrinsic value of the Woods. Some volunteers are birdwatchers, coming to spot birds for recreational enjoyment, whilst others mentioned interests in funghi, lichen, rare plants, beetles, bats, butterflies and trees. The objectivity of this intrinsic value can be found in the above examples of ecological heritage, biotic community and existence value.

i) Global wellbeing / balance

This value was conceptualised in two slightly different contexts. Firstly, many participants stressed the importance of having “an alternative place” to come, “a breathing space”, somewhere “different from the area immediately surrounding it”.

“In a city you have to have a balance … we’ve already got cars, buildings, people. We need a space for people to come as an alternative [to that]”
Secondly, participants’ concerns over global and local climate change prompted many to argue for the retention of wooded green space to enhance climate stability.

“...A green lung in a very polluted and many ways, dreary encircling world ... to help dissipate a little bit of that damage”

“One good thing is having trees to absorb carbon dioxide ... even in a world unpopulated [by humans] it encourages the continuation of nature”

“It’s very important to have forestation in areas that otherwise would be concrete just for the whole general atmosphere”

“We should be cutting down on the oxidisation of carbon, the creation of carbon dioxide... We need to take some of that stuff out of the atmosphere and one way is to have permanent woodland”

j) Life support

An urban wildlife area, such as Sydenham Hill Wood, is a life support system for the biodiversity resident both within it and around its periphery. Almost all explanations and empirical support of the recognition of intrinsic value given in the preceding examples contribute to an explanation of a UWA’s primary function as a small, local, life support system for urban non-human species. The life support value is further illustrated by comments such as “the benefit of all those trees ... photosynthesising”, “the hydrology of the place”, “the good base for everything to breed” and the sense that “if you got rid of these spaces ... wildlife in the city would lessen”.

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4.3 Summary of findings

Results of Phase One indicated that volunteers at Sydenham Hill Wood consistently score higher on the NEP survey in contrast to visitors to the Woods who, on average, polled slightly lower NEP scores. When the Phase One datasets were compared with those from studies by Dunlap et al (2000), a similar frequency distribution towards an overall pro-environmental orientation was found. Moreover, those participants polling in the higher survey score range are considered to confirm the existence of ecocentric urbanites.

Phase Two results indicate that all ecocentric urbanites interviewed recognised at least one of the three predominantly objective intrinsic values i.e. existence, biotic community and / or recognition of life, with the majority scoring highly on all three indicators (NEP, FST and IVT). Combining the findings from Phase One and Phase Two indicates that participants who express the fullest spectrum of values (FST) also recognise the highest proportion of intrinsic values (IVT). However, there appears to be no evidence to support the expected positive correlation between NEP scores and IVT.
Chapter 5: DISCUSSION

5.1 The philosophical implications of findings

“I’m struggling hard against living here, in an urban environment”\textsuperscript{16}

The empirical evidence produced in this research lends support to and / or detracts from, a number of interrelated hypotheses regarding humankind’s relationship with the environment, which were touched upon in Chapter Two. It has been proposed that urbanisation distances humanity from its biophilic relations, resulting in a reduction in the complete set of values required to fully respect the neo-ecosystem within which the urbanite resides (see Section 2.1.2.). It was this value constriction, which is suspected to occur at the non-instrumental end of the spectrum, which prompted the researcher to go in search of the existence of ecocentric urbanites.

This suspected reduction in the gamut of environmental values is posited by Satterfield (2001) to be more a function of the reduced opportunities to exercise value literacy, rather than a reduction in the set of environmental values themselves. In other words, it may be that it is the inherent difficulty to talk about things you never usually discuss, rendering the most eloquent of people inarticulate when asked to describe less tangible environmental values, rather than a failure to recognise the existence of such values. This has parallels with
Lockwood’s assertion that there may be no psychometrically sound instrument with which to elucidate ecocentric orientation (1999). Satterfield’s point is further discussed in Section 5.2.1 below; for now, the researcher intends to focus on placing the results obtained in Chapter 4 in the philosophical context presented in Section 2.2 above.

In the following section, Light’s line of reasoning on the moral corruption of urbanites and associated environmental disvalue, together with Felonneau’s findings on urbanophilia, are considered alongside the Sydenham Hill Wood results (Light, 2001; Light & Wallace, 2005; Felonneau, 2004). Preceding this, however, Wilson’s biophilia hypothesis is briefly discussed in relation to points raised by a number of Phase Two participants.

5.1.1 Biophilia and value recognition

Over three quarters of Phase Two participants interviewed expressed a “connectedness” with the UWA in question, which many of them actively sought as an antidote to the “artificiality of city life”. When asked whether city dwellers lose this “connection” when not in wildlife rich areas such as the Woods, one participant replied,

“Concrete jungles are not really connecting with what we’ve got here … and there’s a kind of madness in that … to be so disconnected … If young people

16 All quotes are taken from participant transcripts in Phase Two, unless otherwise stated.
grow up without that sense [of connection] there’s something so big missing”

In an even more profound endorsement of the importance of retaining relationships with our evolutionary neighbours, another participant, who at the time was attempting to describe why she believed it important for humans to maintain biodiversity, explained that,

“Our society is suffering hugely from the lack of biodiversity around them ... people are stuck in offices all day, go to the gym in an indoor building to get exercise, living in a concrete and tarmac environment. I don’t think it’s a [physically or mentally] healthy approach”

Although consideration of human health is an indicator of an anthropocentric worldview orientation, these observations of biophilia serve to illustrate that the ecocentric urbanites discovered in the course of this research recognise a suspected root cause of the failure to build sustainable, ethically sensitive, ecologically principled neo-ecosystems. Yet they themselves reside in what is described as a value reducing, morally corrupt environment17.

It is not unexpected that those who voluntarily work in bio-rich UWAs have an expansive range of environmental values and associated ecocentric tendencies - what is surprising is that only 38% of visitors to the same site exhibit a similar ethical inclination. However, it should be noted that although the higher mean average score of volunteers has been found to be statistically significant in

17 See Section 2.1.2
comparison to that of the visitors’, both averages were only 5 points apart, with visitors polling NEP scores at the upper end of the inconclusive range and volunteers coming in at the lower end of the ecocentric range.

5.1.2 Urbanophilia, moral corruption and value recognition

In order to provoke value recognition, Phase Two participants were asked to cite perceived threats to the UWA. Almost all participants mentioned incidents of antisocial (and anti-ecological) behaviour, such as vandalism, arson and fly tipping. Some considered these day-to-day occurrences before more long-term and / or irreversible threats, such as land development or climate change, possibly because as volunteers they are the people who seek to mitigate or rectify such acts committed by “kids … that come here to vandalise the place”. When asked why they think young people cause damage in the Woods, a participant youth worker replied,

“They see it as a place where you can wreck things … they don’t see it as an issue ... It’s a lack of knowledge and a lack of interest … It’s just a load of old trees with grass and mud. They don’t see it as important to preserve places like this”

Although this research did not produce empirical evidence to indicate the worldview orientation of these unwelcome visitors, it could be argued that if only 38% of visitors polled were ecocentric – the vast majority of which we can be confident do not come to the Woods to commit anti-ecological offences – then an
even smaller percentage of unwelcome visitors would be found to be ecocentric urbanites.

Furthermore, the assertion that urbanophiles\textsuperscript{18} have a higher tolerance for socially undesirable behaviour may need to be refined in light of these findings. Although some volunteers expressed emotional difficulties living in an urban environment, the majority of ecocentric urbanites uncovered are city-lovers – if one assumes their continued choice of residence is a product of choice, not economy. Therefore, if – as Felonneau claims – urbanophiles are conditioned to forget ambient dirtiness and disrespectful behaviour, then those who are happy to reside in a city should be unperturbed by incidents of environmental crime. Yet many of the urbanites interviewed have a very low tolerance of eco-criminal behaviour and voluntarily work to rectify such crimes.

Indeed, many of the urbanites polled considered the UWA an oasis amidst the concrete jungle of London – “a jewel in the crown” – but it is the small army of London Wildlife Trust volunteers who keep this jewel polished. Therefore, it is suspected that their status as ecocentric urbanophiles helps explains their environmental sensitivities and morally good behaviour, although it is unknown what came first – their ecocentric outlook or their decision to become an environmental volunteer.

\textsuperscript{18} See Chapter 2, Section 2.1.2
5.2 The policy implications of findings

If public bodies are to meet their legal and policy obligations to conserve and promote biodiversity, we must consider wildlife habitats and opportunities for their re-creation as a land-use with intrinsic value.

(RSPB, 2005:4)

In environmental development, spatial planning could be said to physically manifest the philosophical underpinnings of society’s relationship with nature, although the connection between environmental ethics and city planning has been greatly overlooked (Gunn, 1998). As such, society is the philosopher, the planner and ultimately the creator of neo-ecosystems in its role as judge, jury and executioner of current environmental policy.

It is also argued above, that if we are to build truly sustainable, environmentally benign cities, the value system of urbanites should be considered. As subjective values have been declared transient and aspects of planning decisions are often irreversible, e.g. the destruction of ancient woodland, a case can be made to add weight to values that advocate place not people. The final section of this chapter therefore considers the practical implications of the results of this research in relation to sustainability, urban planning policy, and environmental decision-making.
5.2.1 Environmental decision making

As pointed out by Satterfield (2001), environmental value literacy is a function of both conceptualisation and eloquence. Furthermore, non-human dependent values are not only difficult to articulate by even the most ecocentric of urbanites, they are also tricky to address within the current framework of planning law. For example, a license to permit ecologically unlawful development may be issued if a proposed development is expected to breach the protection afforded the site. This process requires plans to contain mitigation and compensation procedures before development can take place.

However, this safeguard is specifically designed to protect species and / or their habitats. If the valued site is not home to or visited by species listed on Schedule 5 of the Wildlife and Countryside Act (1981) or Table 1 of the Habitat Regulations, no licence or associated measures are required to develop a proposed area. Therefore, landscape level or biotic community based values are not subject to legally defensible precautionary measures.

Recent changes in the planning system intended to streamline the local planning process and aid involvement of local community aspirations, have allowed those who value particular sites for other more intangible reasons to have their feelings acknowledged in Local Development Frameworks (LDFs). These Frameworks aim to support the Government’s national sustainable development objectives
and biodiversity requirements at local, national and international level. This has been further reinforced by the biodiversity clause in Part 3 of the Natural Environment and Rural Communities Act (2006) and the formation of a new wildlife body – Natural England – who’s Strategic Direction 2006 to 2009 begins with the sentence,

Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings.

(Natural England, 2006)

Although a clear interpretation of what this oft misinterpreted value means to Natural England has not been given, this new non-departmental public body (NDPB) intends to recognise ‘the intrinsic value of England’s biodiversity’ and pledges ‘to ensure that the value of the natural environment is factored into decision making’ (ibid, italics added). Therefore, in theory, citizens who advocate the protection of objective intrinsic environmental value should have their concerns considered alongside traditionally recognised anthropocentric values such as amenity and economic prosperity. For instance, continuity and biotic community values could be cited as reasons for avoiding certain types of compensatory actions that may have little, if any, effect on more instrumental or subjective intrinsic values.

19 Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity (NERC, 2006: 14)
20 italics added for emphasis
Take as an example a developer’s compensatory offer to provide alternative greenspace of similar proportions to that under threat, but in a different location. Dependent on a site’s particular attributes, the curtailing of continuity, the destruction of ecological heritage and the associated disturbance of a biotic community could be put forward as examples of objective intrinsic value affected by development. These values may ordinarily fail to attract recognition when decision-makers focus on the two more anthropocentric pillars of sustainable development – economy and society.

5.2.2 Stakeholder engagement in planning policy

Government and NDPBs, such as Natural England and the Environment Agency, have begun to recognise the importance of community participation in many aspects of local planning, and often actively seek community involvement, for example in LDFs, the local setting of open space standards for recreation sites (ODPM, 2002), and river basin planning (Environment Agency, 2006). However, there are many reported cases where Government pledges of participatory planning are not experienced by developing communities at ground level (Ellis, 2006). Practical barriers, such as the costs involved to seek information or expert advice, are often coupled with perceptional barriers e.g. planners prior relationship with developers or the alienation of laypersons through the use of jargon, terminology or complex language (ibid).
For example, during Phase Two interviews a number of participants believed the site was protected by law through designations but were unaware what these meant in reality. For example,

“I’m not an expert on planning law … that’s something I actually find quite difficult and even very dull … I know that some designations sound very good but in practice can be meaningless … You have to read acres and acres of small print of the planning law, which I haven’t done.”

Most volunteers felt they would be moved to protect the site should it again come under threat from developers, with a sense of safety in numbers required by those less inclined to be vocal about their opposition.

“I’m not particularly proactive on my own so I think if the place was under threat and nobody else seemed to be doing anything about it I probably wouldn’t do anything about it either”

Although decision-makers recognise that what people value in their environment “will be a significant element of the evidence necessary to plan for biodiversity and geological conservation at a local level” (ODPM, 2006: 21), the planning system does not currently allow for the protection of a variety of intrinsic values, especially those without a subjective counterpart. This begs the question as to whether the planning system could or should allow for the protection of objective intrinsic value whether or not stakeholders have the confidence, expertise or eloquence to articulate their concerns.
Chapter 6: CONCLUSIONS & FURTHER RESEARCH

Put simply, this dissertation set out to find ecocentric urbanites and explore the recognition of intrinsic value of nature underpinning their worldview orientation. Prompted by a combination of observations and hypotheses suggesting that continued urbanisation is a dominant driver of unsustainable development, and that the urban dweller becomes accustomed to their ecologically damaged environs, this apparent societal conditioning may result in, or be a product of, the reduction in an urbanite’s environmental value spectrum. This loss of value recognition, particularly at the ecocentric / intrinsic value end of the spectrum, perpetuates a vicious circle of further unsustainable urbanisation through the prioritisation of the anthropocentric pillars of sustainable development, i.e. economic and social sustainability. Consequently, non-human habitats, such as UWAs like ancient woodlands, are irreversibly lost.

If environmental sustainability, and more specifically ecological sustainability, is to be achieved in an irrepressibly urbanising world, evidence for – and consideration of – the recognition of less transient, objective, intrinsic values by urban dwellers will be required. Perhaps the routine consideration of non human-centred environmental values by stakeholders may encourage environmental advisors and decision makers to plan sustainable neocosystems,
not only for the sensibilities of people, but also for wildlife and the almost intangible ‘sense of place’.

The results of the survey and interviews with people encountered in the small ancient woodland in South London – Sydenham Hill Wood – provides empirical evidence that ecocentric urbanites do exist and that their worldview orientations, first indicated by high NEP survey scores, are underpinned by a complex set of values extending across a broad spectrum, i.e. from strong anthropocentrism, through biocentric altruism, to deep green ecocentrism. The recognition of intrinsic value by the urban dwelling LWT volunteers interviewed indicates that it is not always the case that urbanophiles suffer the hypothetically expected reduction in environmental value recognition.

Returning to the specific research questions posited in Chapter 1, the evidence gathered proffers affirmative answers to the first two questions, but with a number of small caveats. In response to whether visitors to the Woods recognise intrinsic value of the site, the evidence shows that they do. However, those found to recognise such values all have strong personal commitments to the site through their voluntary obligations. As such, they may have had their value horizons broadened through regular exposure to a bio-rich UWA. Further research, perhaps monitoring pre and post volunteering NEP scores, may shed light on whether an ecocentric orientation exists prior to, or as a product of, pro-environmental action. It would also be interesting to explore further the value
recognition of ecocentrically oriented visitors rather than volunteers, which unfortunately was not possible this time due to the difficulty of retaining willing participants. Offering incentives or interviewing visitors immediately after completion of the NEP survey may have resulted in a higher positive response rate to requests for more of the visitors’ time.

The second research question posited was in regard to whether those who initially exhibit ecocentric tendencies continue to do so on further examination. The evidence obtained during Phase Two lends support to the known-group validity findings by Dunlap et al (2000), which suggest that high NEP scores are indicative of a pro-environmental worldview orientation. Results of this study also support the observation by Satterfield (2001)\(^2\), that giving voice to values is not easily achieved at a moment’s notice. Many participants needed the full half hour of the interview to explore their notion of intrinsic value, and to articulate it in a comprehensible and specific manner i.e. avoiding the use of terms such as ‘nice’ or ‘lovely’. With time, most of those interviewed were able to converse at the deep green / ecocentric end of their environmental value system in relation to the UWA in question, although many struggled to stay out of the weak anthropocentric zone occupied by subjective intrinsic values such as beauty and tranquillity.

\(^2\) “Study participants are not especially good at, or not given the chance of, giving voice to values that are ethically-charged, deeply held, privately defended or not available to consciousness at a moments notice” (Satterfield, 2001: 331)
The third and final specific research question posited in Chapter 1 entailed the implications of the findings in the context of environmental policy, in particular urban planning. As discussed in Chapter 5, the results both support and detract from a number of interrelated hypotheses and observations regarding humankind’s relationship with their environment. The results would suggest that biophilia drives urbanites to seek out an alternative to their everyday concrete environs but that those who act upon this impulse and visit bio-rich UWAs were not necessarily ecocentric urbanites. In fact, a minority of visitors were found to express an ecocentric orientation, whereas those who returned more frequently to voluntarily care for the UWA, were proven to consistently score higher on the NEP survey and to recognise a variety of intrinsic values, both subjective and objective.

More specifically with regard to the results in the context of sustainable urban planning, many participants were unaware or unclear of the legal status of the land they had expressed a desire to, and currently act to, protect. Previous research into engagement of laypersons, and more importantly stakeholders, in local planning law, reported that the planning process is perceived as dull, complicated and composed of reams and reams of small print. The LWT volunteers were no exception to these views. Yet, the Government departments and NDPBs tasked with involving stakeholders with a variety of planning processes are being advised by Kate Barker of HM Treasury (Barker, 2006) to aid in the reformation of the planning process, which aims to streamline it not for
greater stakeholder inclusion, but to remove obstacles to sustainable economic growth. If planning reform is to be built on a chiefly anthropocentric premise, stakeholders may need to call upon Natural England to clarify further and advocate in favour of the intrinsic values of nature they have set out to champion.

The final conclusion and opportunity for further research involves those unwelcome visitors to the few UWAs, like Sydenham Hill Wood, left in close proximity to city centres. The principle of open access has its benefits as well as its drawbacks. The worldview orientations and value systems of those who commit destructive acts of anti-social and anti-ecological behaviour are often ignored from studies such as this one. Sampling for social research takes place at busy recreational times to increase opportunities for data collection. Therefore, researchers are not in the vicinity when these ‘undesirables’ are most likely to visit, i.e. after dark. It would be interesting to survey local resident young people to ascertain where they fall on the NEP scale. Semi structured interviews elucidating their value recognition would add to this study’s body of data and may provide an opportunity to understand what drives individuals to commit the acts that so incense environmental volunteers. Not only are young people recognised by the United Nations as one of the key stakeholder groups who will help deliver sustainable development (Woods, 1997), these particular individuals may go on to be the urban planners or residents of a future South London.
Bibliography & References


In search of the ecocentric urbanite: Recognition of the intrinsic value of an urban wildlife area by South London residents

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ODPM (2002) Planning Policy Guidance 17: Planning for open space, sport and recreation Office of the Deputy Prime Minister (now DCLG), HMSO © Crown Copyright
In search of the ecocentric urbanite: Recognition of the intrinsic value of an urban wildlife area by South London residents

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Pinchot, G. (1914) The Training of a Forester, Philadelphia: J.B. Lippincott


Preston, C.J. (2001) Intrinsic value and care: making connections through ecological narratives, Environmental Values 10, 243-263


In search of the ecocentric urbanite: Recognition of the intrinsic value of an urban wildlife area by South London residents

Jodie Bettis

Shearman, R. (2005) Can we be 'Friends of the Earth'?., Environmental Values 14, 503-12
In search of the ecocentric urbanite: Recognition of the intrinsic value of an urban wildlife area by South London residents
Jodie Bettis

The Open University (2002) T861 Environmental ethics, Block B, Ethical theory and environmental values, Milton Keynes: The Open University
Tyrväinen, L. (1997) The amenity value of urban forest: an application of the hedonic pricing method, Landscape and Urban Planning 37, 211-222
Appendix 1 - Old map showing boundaries (from LSC Neville, 1987)

Note: Outer boundary of Great North Wood in 1580 indicated by red line. Present day Sydenham Hill Wood is found within the shaded zig-zag area labelled “1”
Appendix 2 – Aerial photographs of Phase One & Phase Two location

Fig 1. Aerial view of South London from 50419 ft. Sydenham Hill Wood is in the centre of the frame, south east of Dulwich.

Fig 2. Aerial view of South London from 8928 ft. Sydenham Hill Wood is in the centre of the frame, south east of Dulwich.
Appendix 3 – Phase One: Survey form

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Thank you for agreeing to complete this short survey. Please answer all questions and return it to a London Wildlife Trust representative or put it in the collection box on your way out. Thank you.

Do you live within a 5 mile radius of Sydenham Hill Woods?   Yes / No

Do you have a second home in a rural location?   Yes / No

Listed below are statements about the relationship between humans and the environment. For each one, please indicate whether you STRONGLY AGREE (SA), MILDLY AGREE (MA), are UNSURE (U), MILDLY DISAGREE (MD) or STRONGLY DISAGREE (SD) with it.

1. We are approaching the limit of the number of people that the earth can support
   - SA  MA  U  MD  SD

2. Humans have the right to modify the natural environment to suit their needs
   - SA  MA  U  MD  SD

3. When humans interfere with nature it often produces disastrous consequences
   - SA  MA  U  MD  SD

4. Human ingenuity will ensure that we do NOT make the earth unliveable
   - SA  MA  U  MD  SD

5. Humans are severely abusing the environment
   - SA  MA  U  MD  SD

6. The earth has plenty of resources if we just learn how to develop them
   - SA  MA  U  MD  SD

7. Plants and animals have as much right as humans to exist
   - SA  MA  U  MD  SD

8. The balance of nature is strong enough to cope with the impacts of modern industrial nations
   - SA  MA  U  MD  SD

9. Despite our special abilities humans are still subject to the laws of nature
   - SA  MA  U  MD  SD
10. The so-called "ecological crisis" facing humankind has been greatly exaggerated
   SA    MA    U    MD    SD

11. The earth is like a spaceship with very limited room and resources
   SA    MA    U    MD    SD

12. Humans were meant to rule over the rest of nature
   SA    MA    U    MD    SD

13. The balance of nature is very delicate and easily upset
   SA    MA    U    MD    SD

14. Humans will eventually learn enough about how nature works to be able to control it
   SA    MA    U    MD    SD

15. If things continue on their present course, we will soon experience a major ecological catastrophe
   SA    MA    U    MD    SD

Would you willing to take part in a 30 minute interview with a researcher from The Open University on your views about your local environment?  Yes / No

Please provide us with the following personal details*

Name .......................................................... (Mr/Mrs/Ms/Miss/Dr – please indicate)
Address ........................................................................................................................................
.............................................................................................................................................. Postcode
Telephone ......................................................... E-mail .............................................................

Thank you for your time

* Please note: Your personal details will not be divulged to any other party and will only be retained by the researcher for the purposes of this survey.

If you have any questions regarding this survey, please contact the researcher - Ms Jodie Bettis - at jlb22@student.open.ac.uk.
Appendix 4 – Copy of information letter to LWT volunteers

Dear LWT Volunteer,

Thank you for agreeing to help with my research.

I am an Open University postgraduate research student writing a dissertation on the value of urban wildlife areas. I have chosen Sydenham Hill Woods as my case study and am undertaking research using a variety of methods, one of which is a short survey to investigate visitors’ general attitudes towards the environment.

With this letter, Ian will give you a survey pack. Each pack contains 20 survey sheets, a collection envelope with string and 5 pencils. I need 100 completed surveys in order to move on to the next stage of my research and I hope that you can help me get to this total.

Preparing the survey: Before you hand out each survey you will need to complete the “Office use only” box as follows;

Date: (date you handed out survey)
Time: (time you handed out survey)
By: (your initials)
Participant: Individual / Group
(please circle whether the person who agreed to do the survey is alone or in a group)
No. in group: (please indicate how many adults & children e.g. 2a 1c)
Location: On site / Off site
(please circle “On site” as you are in the Woods)

Handing out the survey: I would like you to approach visitors to the Woods as they enter the site and ask them to take part in a short survey. As I would like them to complete the survey whilst in the Woods, please give them a pencil (if they don’t have a pen on them), and ask them to return the survey (and pencil) to a London Wildlife Trust volunteer or to pop it in the collection envelopes on their way out.

Here is an example of what you might say to a visitor as you approach them.

"Hello … I’m a volunteer with the London Wildlife Trust. The Open University is doing some research into how people think about the environment and is asking visitors to the Woods to complete a short survey. Would you be willing to give a couple of minutes of your time to take part in this survey?"

This is just an example and you may approach them however you feel comfortable but please ensure that they have a pen or pencil and that you ask them to complete the survey whilst in the Woods.

Collecting the survey: You may either keep the collection envelope with you and intercept visitors on their way out or you can tie the envelope to one of the many exit gates to allow people to drop off the survey on their way out. Ian can advise you which would be the best exit locations for the collection envelopes.

If you have any questions regarding this survey or my research in general, please feel free to contact me on 07945 385889 or jb22@student.open.ac.uk.

Once again, thank you for helping with me with this research project.

Jodie Bettis
Appendix 5 – Phase Two: Interview questions

1. How long have you lived in the area?

2. How often do you come to Sydenham Hill Wood (SHW)?

3. Why do you come to SHW?

4. What can you remember about the first time you visited SHW?

5. How would you describe SHW to someone who had never visited?

6. What, in your opinion, makes SHW an important/special site?

7. Are you aware of any threats to the protection of SHW?

8. If the site were under threat, would you be moved to protect it? If so, what would be your motivation for doing so?

9. If you had to pick three words to describe SHW, what would they be?

10. Would you say that SHW has value over and above its economic or land use value? Is so, how would you describe that value or values?

11. If no humans visited the site, would the Woods still have value?