Rewilding: New Constructions of Nature in Conservation Biology, the Knepp Castle Estate, West Sussex.

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Abstract

This dissertation explores the application of the concept that nature is a "profoundly human construction" (Cronon 1996 p.25) to the recent paradigm shift in conservation biology (Taylor 2005); that is, the new constructions of nature involved within rewilding. Foucault argued all "knowledge is relative" (Darier 1999 p.10), therefore, as we look at nature, we do not see it as it is (Castree 2005). Instead we construct nature through our cultural lenses. Foucault explored how discourses are productive as the inherent power within them disciplines our actions (Darier 1999). Thus conservation does not preserve true nature for the future, rather, it constructs a future nature based on the current discourses within conservation biology. Therefore gaining a full understanding of the implications of the current paradigm shift within conservation biology is vital. Essentially this dissertation fills that gap: questioning the tangled web of the discourse of rewilding, both its idealised dream and its reality in practice, and the limits of the discourse, how it interacts with other constructions and the past paradigm within conservation.

Rewilding has been pioneered by Frans Vera in the Netherlands on the Oostvaardersplassen. It is based on Vera's hypothesis that the European pre-human landscape was not a closed highforest but a wood-pasture driven by megafaunal herbivores which encouraged biodiversity (Vera 2000). This theory of dynamic nature, sustained by natural processes on large scales is becoming the vogue in conservation biology (Taylor 2005). Radical conservationists are beginning to rewild by removing all human traces from the land, introducing large herbivores and undertaking minimal management. One example, Knepp Castle Estate's Wildland Project, was selected as the focus of the research. Knepp is a 3 500 acre estate south of Horsham, West Sussex, where rewilding has been developed in 4 phases since 2001 (Feasibility Study 2007).

A critical discourse analysis was undertaken based upon Rose's (2001 p.135-186) discussion of visual methodologies. Over 2 weeks at Knepp, interviews, discussions and tours were undertaken with the estate owner Sir Charles Burrell and his staff. All relevant emails, documents and media reports concerning the project

were examined. Outside the project, in addition to, examination of rewilding in scientific discussion and the media, 6 conservationists, 5 locals and a representative from the County Council were interviewed. Finally, to gain a sense of full scale rewilding and the source of the discourse, a tour of Oostvaardersplassen was given by Frans Vera. This resulted in a range of texts and statements of rewilding which were interrogated for their common themes, contradictions, context, power relations, meanings and structure to reveal the web of discourses involved in rewilding. This information was gathered to reveal the vision of rewilding at Knepp and its practical outplaying, how the discourse interacts with the constructions of the local area and how the discourse interacts with the past conservation paradigm in conservation organisations and the government.

The vision of rewilding at Knepp was found to be one of a big nature and a radical, innovative project which would make a statement on the landscape. The plan is that once herbivores are introduced, the components of the natural system are in place so nature can regenerate and restore itself, bringing the land back to life. It is an Arcadian dream of a utopian wilderness uncorrupted by man created through the emancipation of nature. The reality falls short of the dream with limited devolution of power to nature. Burrell maintains his control of nature, only allowing it to operate within his selected limits, with the intention that this will bring landscape enhancement and allow his economic plans to exploit the natural resources. In reality this is not a surrender to nature, but a chance to experiment and learn from nature with the aim of working increasingly with nature's rhythms, rather than dictating them.

The local constructions of nature, expressed by local opinion, revealed that whilst there is sympathy towards Burrell's scheme, rewilding is not practical in the area. Burrell's new construction conflicts greatly with those locals wish to reinforce. Firstly, local people struggle with the mixed meanings of the term 'wild' and the perceived danger associated with it. Secondly, they want the estate to be the focus of a traditional, rural countryside, a scenic parkland, an aesthetically pleasing and ordered landscape. This construction of the local area has developed over centuries and is of great significance to local people. Finally, the locals believe this is an area of agricultural land at the peak of its productivity. To not use it as such is a great disappointment and translates simply as neglect and disregard in their eyes. Each of these constructions is highly important to locals and greatly conflicts the new nature rewilding is constructing.

The ability for traditional conservation groups to incorporate and accommodate ideas of rewilding was found to be mixed, depending upon the ethos and discourse of individual institutions. Therefore, the RSPB's target orientation towards specific species on small sites prevents the uptake of rewilding's ideas. Conversely, Sussex Wildlife Trust's remit to support all nature across a large area lends itself to rewilding. The government's framework is fixed to facilitate projects which conform to the traditional conservation paradigm which leaves organisations, such as Natural England, currently having to find alternative ways to progress rewilding at these early stages. As the power of these discourses continues to grow it will forge its own framework of institutions to aid its growth and replication.

Rewilding is an interesting discourse because its surface belief in allowing self-determination for nature suggests that it will produce a truer nature in the future: a new nature not constructed by humans. However, this dissertation concludes this is not the case. At Knepp there is no such submission to nature; instead a complex web of ideals, practicalities, targets, scientific 'knowledge' and biases constructs a new human controlled nature. In addition, as the discourse of rewilding negotiates with those of local people and past paradigms of conservation (as fixed in conservation institutions) the future landscape will not be a wilderness but a mosaic expressing the results of these multifaceted tensions.

Acknowledgments

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1. Introduction

1.1. Discourses of Nature

"As we gaze into the mirror it holds up for us, we too easily imagine that what we behold is Nature when in fact we see the reflection of our own unexamined longings and desires." (Cronon 1995 p.7)

Nature is no longer an "irreducible positivist reality" (Darier 1999 p.3), rather, it is a complex, contested web of understandings. We do not see nature as a crystal reality but we construct it through the lens of our cultural knowledges (Demeritt 2002). Castree (2005 p.xviii) explains "Knowledge of nature is not the same as the 'natural world' it purports to represent". Our understandings, knowledges and perceptions construct different ideals of what is natural and imbue natural landscapes with different meanings (Nabhan 1995). Consequently, nature is a "profoundly human construction" (Cronon 1996 p.25). The personification of nature or the construction of 'true' nature as 'out there' provide simple examples (Massey & Allen 1984).

Foucault examines how humans create knowledge, arguing that "knowledge is relative" (Darier 1999 p.10). Knowledge is not a fact to be discovered but a social product emerging from the layers of cultural history (Darier 1999). Perceptions, understandings and institutions combine to create a collective knowledge or a regime of truth. These statements produce a way "the world is understood and how things are done in it" (Rose 2001 p.136). Foucault saw discourses as powerful because they normalise a set of ideas, whether true or not, and, thus, influence how we act (Rose 2001). Our psychological constructions of what is natural, therefore, produce an analogous environment.

The BBC production 'Britain From Above: Manmade Britain' (2008), exposes the common misconception of what is natural. As the plane flys over East Anglia with its "reassuringly British" patchwork, agricultural landscape Andrew Marr gives the viewer a "shock for those of us who thought of the British countryside as natural: this country has been man made not natural for over 6000 years" (Britain From Above: Manmade Britain 2008). Discourses have naturalised anthropogenically produced and maintained landscapes such as national parks and the countryside (Carver & Samson 2004). This is not to say that nature does not exist, merely we

cannot view it objectively and the ways in which we view it shape the future landscape. The result is "nature in the 21st century will be what we make it" (Botkin 1990 cited in Lorimer forthcoming).

1.2. Paradigm Shifts in Conservation Biology

Conservation can be examined through the lens of discourses of nature. The terms 'conservation' and 'preservation' construct the belief that these approaches will maintain 'true' nature into the future. However, we can never preserve nature "initself" or "for-itself" (Hintz 2007 p.181). Different discourses of conservation produce different environmental management techniques which produce a range of natures. Current ideas and trends in conservation, expressed ideologically and methodologically in conservation biology, will shape our future natural landscape.

Consequently, the recent paradigm shift in conservation biology is significant as we consider future nature. Conservation biology is at a turning point "caught in the middle of a paradigm shift in value, with scientific thinking, hitherto focused largely upon species and diversity, now encompassing the importance of natural processes of landscape change" (Taylor 2005 p.1). Traditional conservation stemmed from constructions of stewardship: "looking after nature rather than allowing nature to look after itself" (Whitbread & Jenman 1995 p.84). From the end of the 19th century, the proliferation of small organisations, such as the National Trust, used protectionist policies to preserve biodiversity *in situ* (Soulé & Noss 1998, Robertson & Minter 1995, Adams 2004, Taylor 2004). The unusual or sensitive were protected in small pockets "where something exceptional is taking place" (Whitbread & Jenman 1995 p.86). The result was high level management, target orientation and a static nature (Jeeves 2006, Appelquist et al 2001). This conservation discourse controlled and specified a future nature.

The paradigm shift towards the end of the 20th century was triggered by the realisation that conservation, based on specific species protection through high control at small fragmented reserves, was not working (Taylor 2005). It was asked "How have we lost so much while we have protected so much?" (Foreman 1995 p.10), and nature's "precipitous decline" (Foreman 1995 p.12) and "biological meltdown (Foreman 1999 p.537) were discussed. To combat these problems a new discourse emerged from conservation biology's latest research. Lorimer (forthcoming p.32)

summarises: "These new temporalities are more open-ended and process-orientated, focused less on the preservation of extant species diversity than on the conservation of the processes that secure future difference". The focus is shifting to protection of holistic systems. This involves ideals of big nature on big scales, connectivity and wilderness. Herbivores, rather than humans, are viewed as the drivers of the system, producing a nature that controls itself (Foreman 1999). The nature resulting from this discourse is dynamic, transient and unpredictable.

This discourse is most evident within rewilding originating from the work of Frans Vera on the Oostvaardersplassen in the Netherlands, resulting in his hypothesis:

"The natural vegetation [of Europe] consists of a mosaic of large and small grasslands, scrub, solitary trees and groups trees, in which the indigenous fauna of large herbivores is essential for the regeneration...The wood-pasture can be seen as the closest modern analogy for this landscape." (Vera 2000 p.9)

Previously it was believed the past European landscape was a "great wild wood, an almost unbroken canopy" (Britain From Above: Manmade Britain 2008, Birks 2005). However after observing greylag geese preventing succession to a wildwood on the Oostvaardersplassen, Vera questioned whether past megafaunal herbivores had a similar role. Were herbivores vital drivers and determinants of natural systems, creating "the living conditions for the European biodiversity" (Vera, 2000, p.xv)? Vera concluded this was the case and "the original vegetation in the lowlands of Europe is a park-like landscape where the succession of species of trees is determined by large herbivore mammals and birds" (Vera 2000, p.376).

If Vera is correct, and traditional approaches fragment and degrade biodiversity, whilst, unmanaged, dynamic systems driven by herbivores on large spatial scales sustain and promote biodiversity, then "the highest priority must be to allow wilderness to develop once again" (Vera, 2000). This belief in nature's self-determination is encapsulated in rewilding (Fisher 2006, Smith 2007). This conservation method was pioneered on the Oostvaardersplassen, where 14 000 acres was fenced, all traces of human existence were removed and present day analogues for past megafaunal herbivores were introduced (Parfitt 2006).

This new discourse challenges past ideas. As discourse shapes new interactions with the land, via conservation techniques, a new nature will be produced.

There is a need, therefore, to study this discourse and its production of nature, its aims and its realities. I intend to explore this using the case study of the 'Wildland Project' at Knepp Castle Estate (Knepp hereafter), West Sussex. This turning point will shape our future landscape, thus it is vital its current and potential future production of nature is explored.

1.3. The Knepp Castle Estate

Knepp is a 3500 acre, 11th century estate, south of Horsham, West Sussex, figure 1 (Feasibility Assessment 2007). Located in an "intensely settled and farmed" (Short 2006 p.38) area, there is high pressure on landuse and expectations of a traditional rural lifestyle. The agricultural focus of the estate has fluctuated alongside farming trends associated with economic cycles until recently. After inspiration from a trip to the Oostvaardersplassen, Sir Charles Burrell (Burrell hereafter), the charismatic estate owner with a passion for wildlife, embarked on his own rewilding with Knepp's 'Wildland project'.

Knepp was selected as the site of study for a variety of reasons. The owner was open and enthusiastic. The project was inspired by the Oostvaardersplassen and is advised by Vera, in addition to, other high profile conservationists. In addition, a range of discourses will be expressed because this is not a case of changing wasteland but of transforming a traditional, agricultural estate in a crowded area of Britain. Finally, this is a project in progress and therefore there is potential for the study to be useful in its future.

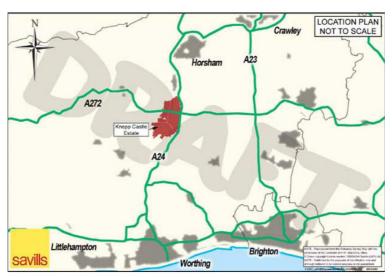


Figure 1: Location of Knepp Castle Estate (Feasibility Assessment 2007 p.10)

1.4. Statement of Intent

There have been a range of studies of rewilding. Experiments have explored the processes Vera proposes, such as associational resistance, the role of trophic levels in ecosystems (Bakker et al 2004, Smit et al 2005, 2006, Duffy 2003), woodland succession as driven by herbivores (Kirby 2004) and the paeloecological evidence for wood-pasture as opposed to highforest (Birks 2005). In addition, a number of studies have described rewilding projects. In Britain, examples include the Carrifran Wildwood Project (Ashmore & Chalmers 2004), Ennerdale (Browning & Yanik 2004) and Allandale (Sidaway 2006). Discussions have also developed into a debate of the possibility of Pleistocene rewilding in North America (Caro 2007, Chapron 2005, Dinerstein & Irvin 2005, Donlan et al 2005, Schlaepfer 2005, Shay 2005). In the public sphere, there has been controversial debate concerning the reintroduction of predators (Reinhardt & Kluth 2004, Rauer 2004, Von Arx & Breitenmoser 2004).

Rewilding, however, has not been considered in terms of the current "proliferation of discourses about the environment" (Darier 1999 p.2). This introduction has acknowledged that human discourses are increasingly defining the future landscape we conserve. Rewilding must be analysed in these terms, considering conservations paradigmatic shift and the challenges it poses as landuses change and as humans release their grip on nature. In the past we have carefully created our future nature through conservation targets and management. Letting go and allowing nature to go wild is a discourse that challenges core perceptions of 'nature' and what is 'natural'.

"The truth is that nature conservation is as much an idea as anything else and ideas have changed over time...We look after what we like...wild land, or wilderness, is certainly an idea everyone will have an opinion on" (Jeeves 2006 p.16)

This study intends to use Knepp to explore, firstly, the tangled web of the idealised discourse of rewilding and how it translates into practice. Then, secondly, whether the resulting landscape is the future nature we want.

2. Site and Situation of the Knepp Castle Estate

2.1. Knepp Castle and surroundings.

Knepp is a 3500 acre estate located south of Horsham, West Sussex (figure 1, 3). Southeast England has a varied landscape, Marlowe's (1589) description of the area as having "infinite riches in a little room" (cited in Short 2006 p.197) still holds true. The geomorphology surrounding Knepp, the Weald and the South Downs, create stunning natural vistas (Brandon 2003).

"Few fail to be seized with an uplifting spirit as the beauty and wonder of some 30 or more miles of England at its most glorious come into view from the crest of one of the bordering hill ranges of the Weald... the North and South Downs are for the most part near the horizon circle and frame a huge bowl of exquisitely modulated space." (Brandon 2003 p.1)

However, this is not natural but "beautifully man-made" (Brandon 2003 p.5). In 1086 it was the largest forest remaining in England; since then, it is "one of the longest-running and best recorded examples of the unremitting labour of generations of farmers to clear and settle a great expanse of wild country" (Brandon 2003 p.2). The southern face of the South Downs is a patchwork of arable fields, whilst the north face has chalk heath, grassland and scrub (Short 2006). The Weald, where Knepp is situated, is "a dense mosaic of small fields surrounded by shaws, broken up by sunken lanes, roadside verges, ponds and ancient semi-natural woodland" (Short 2006 p.52). This is a crowed agricultural landscape. London, the "gateway to the world" (Short 2006 p.17), is accessible by the M23 and the area is covered by a network of A-roads. Knepp is flanked by the A24 and divided by the A272 (Feasibility Assessment 2007). The increasing trend of counterurbanisation, the search for "environmental quality" and "rural living" (Short 2006 p.103) has seen city people immigrate to the villages around Knepp. This landscape is shaped by socio-economic trends as economic fluctuations leave a "profound imprint" (Short 2006 p.124).

In keeping with these trends, Knepp has undergone a wide range of landuse innovations since its creation as a defensive site in the 11th century, including its use as a lodge with associated deer park until the mid-16th century, with iron workings from the 13th century (Feasibility Assessment 2007). The Burrell family has owned

the estate for over 200 years; as Burrell took over the Southeast's landscape shifted. As agriculture boomed, Knepp followed the pattern of intensification and diversification. Fields were extended, ice cream, yoghurt and milk were manufactured (Feasibility Assessment 2007) until farming's decline forced the sale of the factory and turning over of land to contract farming. As farmers increasingly set aside land and began environmentally sensitive schemes (Short 2006) Burrell entered land surrounding the mansion into parkland restoration under the Countryside Stewardship Scheme (CSS). This CSS was to be extended and developed into the Wildland Project (described below). Currently, alongside the Wildland Project, Knepp consists of a mansion with grade II listed parkland, 80 residential properties, commercial properties, in-hand and let land, small wooded areas and a polo club (Feasibility Assessment 2007).

Knepp has always been a site of change, yet, thus far, changes have been common with those across the agricultural landscape. The Southeast is renowned for natural, emotive views and traditional agricultural. The large population, many of whom left the city to grasp this dream, love the idyllic, rural lifestyle. When viewed in context, Knepp's Wildland Project is not just another innovation but a landscape transformation.

2.2. Rewilding at Knepp: 'The Wildland Project'

The project is best considered in 4 temporal phases each incorporating a specific spatial area (figure 3). Phase 1 began in 2001 when 500 acres was entered into parkland restoration. Inspired by visiting the Oostvaardersplassen, Burrell dreamed of restoring the estate to its pre-agricultural roots by rewilding. He saw this as a way to maintain economic viability and tackle environmental decline (figure 2). As a result, phase 2 (2004) extended the parkland to its logical spatial boundaries and saw further herbivore introductions. As the project moved towards rewilding restrictions had to, and still have to, be adhered to due to the terms of the CSS. Currently, 50 English Longhorn Cattle, 300 fallow deer, 17 Exmoor ponies, 20 Tamworth pigs and 300 000 rabbits graze here. Phase 3 was also initiated in 2004 as the area north of the A272 was set aside. Human traces were removed and a fence erected. 50 English Longhorns graze this area with wild roe deer and rabbits. Phase 4 included the southern block, which Burrell hopes to fence to introduce grazers.

Progress here has been halted due to lack of funding. In the future, in addition to having a more complete set of grazers and perhaps wilder analogues, the estate hopes to connect the areas and cater for visitors. By 2010 the Wildland Project should include 3600 acres and act as a flagship project inspiring others (based on interview with Burrell, Feasibility Assessment 2007 and www.knepp.co.uk [Accessed 10/12/08]).

Vision

"An Estate where natural processes predominate and long-term financial stability is achieved outside a conventional agricultural framework"

Aims

- long-term retention of the core estate;
- financial stability;
- to increase the diversity and value of the property portfolio over time;
- to increase biodiversity and ecological interest across the estate through environmental stewardship.

Figure 2: Vision and aims of Knepp's Wildland Project (Feasibility Assessment 2007 p.5).

The Wildland Project is driven by the passions and personality of its creator, Charlie Burrell. Burrell is popular in the local community. I was told "everybody loves Charlie" (D) and "he's open, you can laugh with him...he's a good guy" (Kampf). Burrell has an overwhelming love of nature. At school he was 'Bug Burrell' and his knowledge of natural systems is immense. He is also a businessman who makes careful, detailed calculations but will take risks where potential gains are great. There is always a buzz when Burrell is around; he is friendly, generous, bold, charismatic and a complete optimist, full of belief in himself and Vera's hypothesis. Burrell wants to do something significant with his land, something big and exciting, which he, and others, will be proud of. I was told accurately by a local this project "frankly is emotional" (A). It is only with drive and honest passion that Burrell has achieved so much.

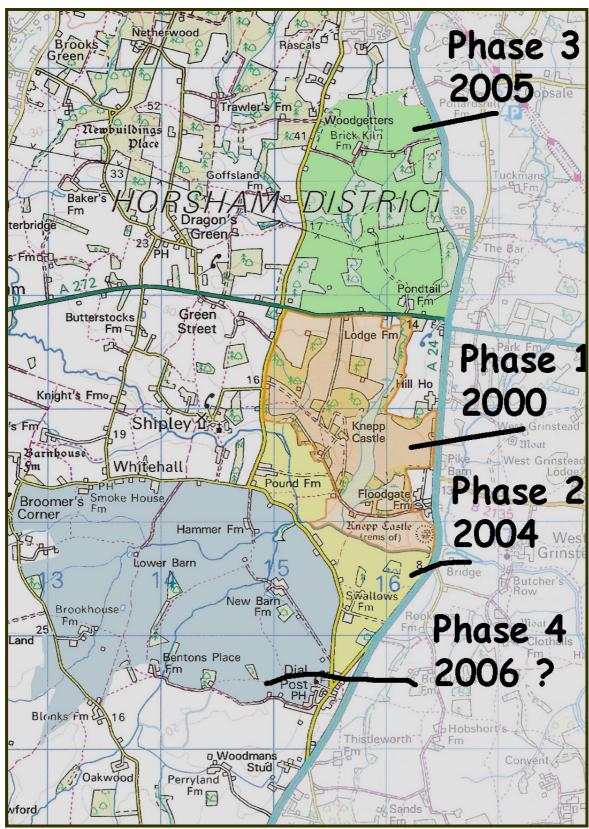


Figure 3: Four Phase Map of the Wildland Project at Knepp, Phase 4 has now extended to 2009. (Emrich 2008)

3. Methodology

3.1. Critical Discourse Analysis

Through an appropriate methodology this dissertation aims, as Foucault did, "to constantly challenge the limits as defined by the various discourses and practices" (Darier 1999 p.16). Rose (2001 p.2) explains "Despite the huge amount of academic work currently being published on things visual, there are remarkably few guides to possible methods of interpretation and even fewer explanations of how to do those methods." Rose (2001 p.135-186) discusses how best to approach, analyse and interpret visual materials. He outlines two types of analysis. 'Type I' focuses on reading the language of discourses. This not only involves the analysis of verbal accounts but the range of texts, such as photos, maps and literature, through which we construct our world. 'Type II' refers to the power discourses have to control our actions through institutions, regimes, practices and technologies. The following methodology is based upon Rose (2001).

A discourse is defined as "groups of statements that structure the way a thing is thought, and the way we act on the basis of that thinking" (Rose 2001 p.136). Statements will include the language, rules, conventions, institutions and subjects and the visual or verbal images, texts and practices (Rose 2001). Each of these are the outplaying of the discourse as it dictates human actions. Such actions continually create and reinforce the discourse. Thus, the first step is to examine "the vast heterogeneous webs of social practices criss-crossed by relations of power" (Darier 1999 p.15).

I submersed myself for 2 weeks at the site; undertaking extended interviews, discussions and tours of the estate with the owner and his staff. I examined all documents, e-mails, letters, newspaper articles, radio programmes and reports concerning the project. In addition to my self-guided reading, I read the literature Burrell felt necessary to understand their project. Research outside the site included interviewing 6 conservationists, 5 locals and a representative from the County Council (see table below), visiting the Netherlands where Vera gave me a tour of the Oostvaardersplassen and exploring representations of rewilding in the media (newspapers, magazines, radio, TV documentary).

These statements were analysed discovering how they construct the social world and how they normalise the discourse representing its claims as natural, real and truthful. Rose (2001 p.4) states "successful interpretation depends on a passionate engagement with what you see"; perseverance, rigour and examination of detail are vital. After becoming familiar with the texts, it is important to approach them systematically without any preconceptions. The images must be coded and how they create meaning considered. Trudgill (2001) discusses specific, value-ladened, rhetorical terms conservationists use. Darier (1999 p.11) also emphasises the using written or spoken phrases, stating one must explore "the meaning and significance of linguistic signs". The meaning, structure (especially in terms of intertexuality), complexity, contradiction, visibility, invisibility and context of the material must be considered (Rose 2001). The power relations expressed through apparatus, such as architecture, laws and morals, and technologies or practical techniques, must be explored. Throughout this process it is important not to fabricate connections or meanings as Foucault (1972) warns "we must show that they [the connections] do not come about by themselves, but are always the result of a construction" (cited in Rose 2001 p.150).

Figure 4 outlines my interviews and the codes used to refer to them throughout the dissertation. For those I interviewed, where relevant, details of their position within the Knepp project are described (details omitted to preserve anonymity).

Interviewee	Details	Code of Reference
Charles Burrell	Estate Owner	Burrell
Jason Emrich	Estate Manger	Emrich
Knepp's Research Coordinator	Steering Group	RC
Frans Vera	Visionary of Rewilding	Vera
Keith Kirby	Natural England, Steering Group.	Kirby
Hans Kampf	Minister for Nature, Netherlands, Steering Group	Kampf
Tony Whitbread	Director of Sussex Wildlife Trust, Steering Group.	Whitbread
Conservationist	Sussex Wildlife Trust	Conservationist
County Councillor		Councillor
RSPB Representative	At Pulborough Brooks 15 minutes drive from Knepp.	RSPB
Local		A
Local		В
Local		С
Local		D
Local Farmer E		

Figure 4: Table of Interviewee details

3.2. Reflexivity and Positionality

This dissertation discusses the production of knowledges, thus, the fact that it is in itself a produced knowledge must be considered. The very nature of the project forces the admission that there is no object subject relationship, no universality, because "the sort of knowledge made depends on who its makers are" (Rose 1997 p.307). The solution proposed to this is "transparent reflexivity" (Rose 1997 p.311). The research must make visible their positionality on two levels. Firstly, the researcher must look inside considering their perspective in approaching the project. Secondly, they must look outside considering both their informant's position within the research and the effect of their relation with the informant (Rose 1997). The need to acknowledge my position became dauntingly evident in an interview as my informant exposed both my approach and our differences:

"What is so good about that project? Well tell me, you've got an interest.

Perhaps you could... how could people answer you, I don't know...Well
you're a student, I'm a pilot, ****'s a housewife. What's a conservationist?

Do you see where I'm coming from here?" (A)

I am a white, middle class student from a renowned university. Whilst trying to remain neutral and open, my research will have been affected by my belief in conservation and desire to explore rewilding. I found it easier to connect and understand those who shared this view, having to work harder, asking more questions, of those who did not. The researcher must consider the power relations this creates (Valentine 2005). In one sense I held all the cards. However, the majority of those I spoke with were of similar age and situation to my parents with children similar to me. Whilst we could therefore empathise, this influenced the power balance. In addition I found everyone I spoke to had reasons for participating. The Estate look forward to an Oxford student's account for their website. The conservationists wanted to encourage a student and have their say. The locals want the estate to hear their opinions and reservations, with one informant suggesting I was becoming "pig in the middle" (C).

Yet, simply highlighting and considering these influences is inadequate.

Crang & Cook (2007) state self knowledge is an elusive dream. I cannot claim to have fully understood all the nuances of their meanings. As the informant questioned,

could I see where he was coming from? To claim universal, objective understanding of these subjectivities would be "nothing more than a goddess-trick uncomfortably similar to the god-trick." (Rose 1997 p.311). Crang & Cook (2007 p.14) suggest instead researchers must ensure work is "theoretically sampled, saturated and adequate". That is, selecting a sample that will portray the spectrum of positionalities, continuing interviews until you gain no new information and reading to ensure your conclusions fit with those of others. I have strived to achieve these aims. Rose (1997) suggests we must develop the idea of reflexivity. Applying Foucault's theories, Rose (1997 p.315) views research as a discursive formation: "constitutive ... both of the researcher and of the others involved in the research process". Research is a text produced through the negotiation of the conservations involved. Researchers must accept "we make our own knowledge, and that this process is complex, uncertain and incomplete." (Rose 1997 p.316). Therefore, I am not "representing [myself]...as an expert in their lives" (Valentine 2005 p.114). Those I spoke with and the material I examined have constituted and shaped my ideas on this journey and subsequently are embedded alongside my bias and interpretation within this project. This dissertation offers a perspective on rewilding, not a universal one but nevertheless a valid representation of conversations and negotiations through which I acted the weighted medium.

4 The Knepp Vision

4.1. The Dream

Rewilding is a vision of big nature. It is about doing something innovative that will make a statement. On the Oostvaardersplassen, the plains stretch to the horizon, grazed by wild Heck Cattle, Konik Ponies and Red Deer (Harris 2006). The Knepp dream has grown from this vision; it is a bold, grand plan for a full-size nature:

"[Burrell] sees that you need a bigger picture in terms of nature conversation and although he is still one individual, a huge individual, he's looking at the rewilding and putting back what wants to be there and creating this big load of biodiversity and then once he's done that he would like to connect it by land bridges and to the river and all that sort of stuff, so you're looking wider" (Conservationist).

Burrell's love for nature and belief in Vera's hypothesis is the source of the dream. He is also a business man willing to take high risks for potentially large economic and environmental gains. Burrell is eager to make his imprint on the landscape and challenge people's preconceptions. As Burrell drove me around the estate, the pinnacle of the tour was a southern field set aside for 20 years. We admired the large anthills, patches of grass, trees and undergrowth. Then Burrell asked me to imagine this wilderness across the entire estate. He told me there could be no such thing as too wild and he accepted parts of the estate would become impenetrable. This huge vision of a mixed wood-pasture landscape is the visualisation of Burrell's dream of the future landscape. It is big, exciting and radical.

Integral to the vision of wild is that the area should be "removed from human dominion" (McCloskey 1999 p.380). It is a dream of minimal human management as control is sacrificed to nature. Burrell told me true, wild nature is where humans feel like a visitor. The opening page of the Knepp website states:

"2001 we shifted our focus entirely and embarked on a series of regeneration and restoration projects aimed primarily at nature conservation." (Available www.knepp.co.uk Accessed 10/12/08)

Integral to Knepp, 'regeneration' and 'restoration' are key terms within conservation biology terminology. Hall (2001 p.586) cites Wilson's declaration that this is "the era of restoration ecology". Agriculture has degraded the landscape and, by stepping back man, will allow nature to regenerate and restore itself to its pre-human glory. Tied within this emancipation of nature is the belief that self-determination for nature will produce better quality, healthier nature. As the BBC documentary Moose In the Glen states:

"it needs to have back the animals that were living here hundreds of years ago to really make the place come alive" (Moose in the Glen 2008)

The natural environment will only be truly alive and fulfil its potential with all the elements of the ecosystem in place. A local Sussex newspaper article reinforces this:

"Mother Nature has been left to run wild instead and goodness; the old girl is having a ball" (Mitchell 2007).

In this sense the rewilding dream demands rethinking the traditional 'man over nature' relationship. Taylor (2005 p.4) suggests that "humility and respect" for nature must replace "denial and control". As such the project has no fixed aims or quotas and does not focus on specific 'valuable' or rare species. Instead, the conservationists spoke of emergent properties, nature's surprises which would be revealed once nature was no longer forced to produce fixed outcomes.

Within Knepp's dream there is also a deep nostalgia towards pre-human landscapes untainted by man, an arcadia, as a local press report suggested:

"Get the wild beasts in, not only does it feel good but it is good. The land will breathe an Arcadian sigh of relief and biodiversity will soar" (Marren 2007)

Burrell told me fondly of how anthills, scrub, partridges and hares thrived when the estate was abandoned during the 1920s. There is a sense of harmony in this simpler, unintensive, pastoral vision. The picture is of a virtuous, utopian wilderness uncorrupted by humans. As rewilding sets nature from the oppression of man it will restore, regenerate and become wholesome:

"Boundaries between field hedgerows and woods have blurred completely. All are one. Wilderness has returned" (Mitchell 2007)

Wilderness and freedom for nature is giving Knepp a sense of unity. Whilst all those involved recognise the past, idealised nature can never be regained, there is a sense this is a journey of spiritual healing for the land.

4.2. The Reality of the Light of Day.

"The vision is really exciting, it's that wild vision... but there is a reality you have to turn that vision into practice." (Open Country 2008)

The reality of this dream must be recovered. Beyond the surface rhetoric the reality is a series of complex tensions and contradictions which realise the full discourse at Knepp. The extent to which Burrell truly relinquishes power to nature can be questioned. Revisiting the discussion above, limits to the extent power is devolved are evident. The website talks of 'embarking' on regeneration and restoration 'projects'. Such language implies that humans are undertaking the regeneration and restoration. Ultimately, nature is being used as a tool in a human designed framework for the desired results of humans.

The reference to 'Mother Nature' is also of interest. This personification of nature reveals a reluctance to hand power to something outside the human realm. Personifying nature helps negotiate this tension. Observations showed Burrell is very much in control of the site. This was evident in his driving of his buggy anywhere on the land even through the densest scrub where on the surface nature seems to have full control. This statement of authority reveals Burrell has chosen to devolve some, but not all, of his power.

The assertion that nature is in charge should mean there are no set targets. Indeed, this is what the literature continually reiterates as a visitor reminded Burrell.

"There is clearly a vision of how the Estate should look like in the end, which is in conflict with actually letting nature take its natural course" (Letter 2005)

Whilst on one level this is true, Burrell told me that, for him, it is not a problem for bracken to invade an entire field if that is what nature wants. Yet, contradictions

underlie this statement. Emrich, the estate manager, told me the experiment could go wrong and a 'bad nature' could be produced. Others spoke of disappointments with the nature emerging. There is a target nature, albeit broadly defined. As the 4th objective states:

"to increase biodiversity and ecological interest across the estate" (Feasibility Assessment 2007 p.8)

Increasing biodiversity is a clear aim of the project as it is an assumed result of the Vera hypothesis. If the hypothesis is incorrect there will be a sense that the project has not fully achieved what it set out to. In addition, there is a target for how the estate is expected to look visually, as the Business Plan states it is expected:

"To deliver landscape enhancement" (Business Plan 2007 p.3)

The project grew from a parkland restoration. Emrich told me of their goal to improve the vistas of the estate. Knepp celebrates its cultural, traditional aesthetic parkland landscape and implicitly the project aims to enhance this. The website is full of pictures that supporting this:



Figure 5: Website photographs of views of the estate taken by David Norton. (Available www.knepp.co.uk Accessed 10/12/08)

Views of natural beauty where areas of grassland with isolated trees are grazed represent an idyllic deer park landscape. An assessment was carried out to see how

the shift towards rewilding could endanger the park restoration. It states the rewilding approach will bring:

"wilderness similar in structure and appearance to a deer park" (Appendix 1: Comparison of CSS and Wilderness Approaches appended in a questionnaire Knepp undertook.)

Vera's hypothesis believes the wilderness that will develop when grazers drive the system resembles a parkland. Knepp continually emphasises this through reports, media and on the website. They expect the park they are aiming for to develop through natural processes.

In case it becomes clear that the aims of increased biodiversity and landscape enhancement are not going to be met, the project is safeguarded by 'limits of acceptable change':

"based on the identification of attributes that, it is considered, should be kept within certain limits, deciding what the limits should be and then recommending action should limits be approached or exceeded" (Appendix 2: Suggestion of limits of acceptable change appended in a questionnaire Knepp undertook)

The devolution of power is limited because if change moves beyond the prescribed limits, classified as unacceptable, so nature's power is revoked and action taken. For example if forest cover exceeds a set percentage, grazing pressure would be increased. In addition, there are limits to the degree of 'wildness' to which Burrell will, and can currently, go.

"rewilding is not as an end point but a direction...you look at the options and you take whichever option is slightly wilder" (Kirby)

Burrell explained it is spectrum from intensive beef production to totally wild beef; placing himself 3/5 the way along. It depends on the extent to which you are prepared to push the rules. Currently, predators are not on the agenda and the herbivores selected are docile. However, Burrell suggested as people become more aware perhaps they will be able to get 'wilder', introducing Heck lines for example. Animal

welfare legislation plays a restrictive role here, but again as opinion changes gradually they can move along the spectrum.

In addition, nature has not been emancipated because the project aims to exploit the natural processes through the production of prime, organic meats. Arguably nature has become the new, low budget management tool. The extensive Business Plan (2007) and Feasibility Assessment (2007) alongside the objectives, 2 of which are economic, reveal this. Despite the surface appearance of freeing the land Burrell told me:

"you can't just do nothing with land" (Burrell)

Underlying these surface ideals is a deeper discourse of nature and land. They are resources and they exist for us to use them. As a responsible estate owner, Burrell must utilise his resources cost-effectively. Whilst his love for nature is genuine, Burrell has another equal motivation: retaining the economic viability of the estate by making a profit from his natural resources. When Burrell was asked humanity's role within nature his immediate response, subsequently revised, was a steward. Knepp is not an example of the emancipation of nature, but stewardship of an owner encouraging nature within set limits because he believes this will produce his desired outcome.

When the rhetoric is cleared away, a contradiction is revealed between the desire to create a big, wild nature and what is actually occurring in practice. Only the relatively small area in phase 1 and 2 have a full range of grazers and this area is governed by restrictions of parkland restoration. Phase 3 only has 50 cattle and phase 4 is yet to be fenced. Local E, the farmer, pointed out that there was little difference between his grazing cattle and Burrell's. Seeing the Oostvaardersplassen, with its wilder lines, vast space and lack of economic incentive puts rewilding at Knepp into perspective. The Wildland Project is merely one of the many things discussed on the website and is only briefly acknowledged as a series of conservation projects within the history of Knepp in the Schools Pack. One local pointed out that whilst the neighbouring village's magazine discusses the wildlife at Knepp there is no explicit statement concerning the Wildland Project. Rhetorically the project is a big, exciting natural revolution, whilst, in reality the project is only dipping its toe in the water of

rewilding. This does not devalue the project, it simply reveals a discourse where a façade of grandeur conceals a process of slow movements towards the wild.

On the surface the vision is one of wilderness, however, in reality, it is about replacing a system and creating a space to allow nature to do its work. It is about natural processes and systems operating as they should, without humans driving or limiting them. Looking across the fields I saw a collection of species, but Burrell saw the wonders of the natural system operating:

"I'm sort of gobsmacked just to see what the animals are actually doing here...behind me here there is a great, big patch of thistles and when I look at the thistles every flower head has been eaten...that really makes me quite excited because I think what's doing it?" (Burrell: On Your Farm 2007)

For Burrell this project is a chance to enjoy, appreciate and, most importantly, deepen his scientific understanding of nature. Burrell places great emphasis on understanding the environment, as Whitbread remarked on his connection to the ways the land works and the interactions across it.

"as we were going round with some people, there was a big patch of thistle, 'Oh a big patch of thistles, how terrible,' and he [Burrell] said 'Yeah that's where the fallow deer laid up last year in order to have their foals."

(Whitbread)

Taylor (2005) desires to regain our spiritual connection with nature and the land. The Native American Indians had a deeper sense of meaning and understanding of their environment. They understood how nature worked and worked with it. Burrell is on a similar journey, as Marren (2007) discusses in an article about Knepp:

"We need to reconnect with that sense of wilderness –not only to get a better understanding of nature and how to conserve it, but in terms of the imagination and the human spirit" (Marren 2007)

Burrell is not sacrificing all power to nature but striving towards mutual respect. As his understanding of the functioning of the system grows, so his stewardship can be increasingly in tune with nature's wilder rhythms.

5. The Locals

There is little support for the project in the local area. This is not because the local people are ignorant and have no respect for wildlife, very much the opposite is true:

"I love wildlife, I love the countryside, I love to go somewhere and see butterflies and moths and hedgehogs...I'm not saying I want that all wiped away." (C)

Local people enjoy and appreciate wildlife, especially that encouraged within the rural landscape. The locals enjoy outdoor recreation, such as horse riding and walking, and they are also aware of different methods of conservation. I was told not to eat strawberries at Christmas, to buy local food, that farming can encourage wildlife through increasing hedgerow depth, greater field margins and fallow land and to read the Game Conservancy's methods. The locals are supportive of conservation and rewilding projects, yet, they see a number of practical problems with rewilding at Knepp:

"I don't believe in this scheme, not in the Southeast of England...If this experiment...fails, what guarantee does Knepp Castle give that the land after that won't be...sold to developers...what guarantee will DEFRA or Natural England...give that those grants will be forthcoming year on year...In 2017, 2018...the grant aid will come to an end possibly and this new scheme cannot support itself...once the herds have reached a certain level the horses won't be able to pass through...how can you have wild bird shoots when you've got ponies and deer and pig...The feasibility study says that a possible visitor centre's planned for New Barn Farm, which is currently run as a livery stables...local people keep their horses there; all that is going to have to come to an end...the costs of this are huge...it's just not viable." (C)

After consideration of these practical challenges the locals simply cannot support Burrell's ambition. Placing these practical issues to one side, three ideological challenges of the project can also be identified. The locals' perception of what it means to be wild, what an ideal natural landscape in this area would look like and

what the purpose of this land is, conflict with the dream of rewilding at Knepp. Each of these challenges stems from the discourses embedded within the local area.

5.1. The Fear of the Wildwood.

Throughout this discourse visions of wild continually surface. Terms such as 'rewilding', 'The Wildland Project', 'wilderness' and the 'wildwood' reinforce the fact such projects aim to bring back the wild. Whilst everyone interviewed defined wild as a nature without humans, this statement has other imaginaries associated with it. Literature has painted a picture of the wild and the creatures that inhabit it as a dangerous and foreboding. Local A asked if I had read 'Sword in the Stone', 'Hansel and Gretel', 'Red Riding Hood' or 'Wind in the Willows', did I really know what the wild was like? In the Wind in the Willows, Mole is overwhelmed and terrified by the wildwood:

"The whole wood seemed running now, running hard, hunting, chasing, closing in round something or –somebody. In panic, he began to run too, aimlessly, he knew not whither. He ran up against things, he fell over things and into things...At last he took refuge in a hollow...As he lay there panting and trembling, and listened to the whistling and the pattering outside, he knew it at last, in all its fullness, that dread thing which other little dwellers in field and hedgerow had encountered here, and known as their darkest moment...the Terror of the Wild Wood!" (Grahame 1987 p.26)

Throughout myths, legends and fairytales the primeval wild is a menacing, sinister, forbidding place. Whilst, locals are fully aware such stories are not true, such statements build a negative discourse of the wild as savage. Burrell, and other proponents of rewilding, are aware they need to fight these myths:

"It is essential, in order to gain and maintain public support, to differentiate wild in the sense of 'untamed' but not 'wild' in the sense of 'savage'" (Business Plan 2007)

Wild is a complex discourse in itself with multiple meanings. For the Knepp project they are not rebuilding the wildwood in the sense Mole experiences it. Rather, they

wish to let nature grow untamed. However, even these ideas of uncontrolled, feral nature are part of a discourse of fear. Part of the danger of the wild comes from a sense of darkness and unknown, because uncontrolled wild is unpredictable and illogical. In the Lion the Witch and the Wardrobe this is evident:

"'One day you'll see him [Aslan] and another you won't. He doesn't like being tied down...He's wild you know. Not like a *tame* lion' "(Lewis 1959 p.165-166).

Aslan is not tame, he does not bow to another's rule, he is not weak or docile. Instead he is strong-willed, following only his instincts, he is a powerful and unreadable. Even though Aslan is a good character, traditional ideas of wild as unknowable are subtly reinforced. Humans have worked to rationalise and understand the landscape, ordering nature into gardens and agriculture, now Burrell wishes to unleash the self-willed unpredictable, irrational wild.

Such ideas are continually combated by statements of the reality of the safety of the wild. During the Moose in the Glen documentary it is stated outright that:

"You don't hear stories of people being eaten by wolves in Europe, it's just nonsense, and it's about time that people woke up to that fact, it's about time that stories like Little Red Riding Hood were put into context" (Moose in the Glen 2008)

Such statements juxtapose proven truth with the fable, the contrast exposes such stories as ridiculous. The Knepp website uses images subtly to express the projects safety. This is clear in the discussion of the Longhorn Cattle:







Figure 6: Website photos of Longhorn Cattle (Available www.knepp.co.uk Accessed 11/12/08)

Alongside a description of the history of the Longhorn in the UK and at Knepp, the website discussion states that the cows are checked daily and vaccinated. There is a photo of a parent Longhorn caring for its calf, demonstrating that calves stay, as is natural, with their mothers. The photo of the Longhorn which could be seen as intimidating is placed next to a photo of an African Longhorn so its horns are placed in perspective. The Longhorns are not represented as wild but as docile, caring and as normal farm livestock.

The Tamworth Pigs are similarly represented sleeping in the sun by the castle on the website and in the education pack a photo shows three women stroking one.



Figure 7: Website photo of Tamworth pigs asleep in the sun. (Available www.knepp.co.uk Accessed 11/12/08)

Despite this effort to help people understand Knepp's wild as safe, the previous discourse is too strong. Vera explained to me that in the Oostvaardersplassen only horses and deer are allowed in the visitor accessible area because cattle are deemed too dangerous. In reality, we observed the cattle are very shy and moved away from us, whereas the inquisitive horses seemed to play grandmother's footsteps. The scientific reality is horses pose far more of a danger, yet, because of the strength of our perception of wild cattle as large, unpredictable and frightening, the rules govern otherwise. Knepp faces a similar problem, the local people simply do not trust the wild. Their ideas of the wild are too deeply ingrained from their childhood. This tension is summed up by Burrell as he talks on the radio:

"these Tamworths, they are a little bit too friendly...sometimes you see people on the footpath thinking 'this thing is coming towards me, oh no, what am I going to do', in fact all you have to do is scratch them in between the ears" (On Your Farm 2007).

5.2. 'Negative' Landscape Changes

Local people have particular expectations of how the estate and surrounding area should look. These are embedded within their personal experience and the history of the estate. Traditionally Knepp has been a site of cultural beauty and landscape. These ideas date back as far as 1787 when the particulars of the castle were outlined for an auction stating it was an ideal place to build a Mansion as it is an:

"Elevated and beautiful spot...which would command uninterrupted views over the whole Estate, and the adjacent country of the South Downs" (Available http://www.knepp.co.uk/pages/history/estate_history2.asp accessed 11/12/08)

Emrich told me that vista and view is what the estate is about. The Mansion itself was designed to frame different views (http://www.knepp.co.uk/pages/history/ estate history3.asp 11/12/08). The paintings (figures 9 and 10) further enhance this idea, depicting a parkland landscape, an idyllic lake and the grand Mansion. Figure 8 shows an earlier view of a traditional rural landscape. The local people expect the estate to be the focal point of an "orderly countryside" (D) and to consist either of agricultural or parkland. For them it is these views that are attractive and enhance the lifestyle of the area:

"Where you have got the deer running around and the cattle, it is a lovely sight" (E).

The initial parkland restoration was focused at reliving these romantic ideals of the estate's landscape and this was a dream shared by both the estate and the locals. E told me the parkland which has been restored around the castle is:

"more normal, it's more liveable" (E)

The common idea of nature in this area is not one of wilderness but of a manicured, traditional, aesthetically pleasing view. Farmer E stated:

"it's not the real world, it's not the physical world" (E)

Burrell is striving to allow the recreation of nature but for some the wild vision is just not natural in this area. For local people rewilding ruins the agricultural vision and produces different results:

"it's turning into quite a mess ...a fair old mess really" (E)

Every local interviewed described the area of the Wildland Project, outside of the parkland restoration, as a mess. People gesticulated and encouraged me to look out of the window at the overgrown field. For them this landscape is unacceptable. They cannot comprehend why Burrell would want to transform his estate in such a way. As B was left exasperated trying to compare the landscape emerging to Burrell's aims for a wildland:

"It's not even a wild mess, you just don't see it...I mean I've been all over the world and you get jungle and you get different things but actually this is completely different because you don't feel it should be here" (B)

On one level this is not the 'natural' place for a wilderness, yet, on a deeper level this informant was beginning to question whether these developments were the wild mess Burrell was hoping for. The Vera hypothesis talks of parkland and the Oostvaardersplassen is characterised by striking plains with herds grazing and patches of forest. Whilst this takes time to develop and it is too soon to say if such an acceptable wild mess will develop at Knepp, currently, on a visual level, fields are becoming overgrown and appearing abandoned and unkempt.



Figure 8: W. Grinstead Church and Knepp Castle by S.H. Grimm 1789 (Available http://www.knepp.co.uk/pages/history/estate_history2.asp Accessed_11/12/08)



Figure 9: Knepp Castle, etched by Charles Smith from a drawing by Lady Burrell 1830 (Available http://www.knepp.co.uk/pages/history/estate_history2.asp Accessed 11/12/08)



Figure 10: Water-colour of Knepp Mill pond by Lady Burrell c1820 (Available http://www.knepp.co.uk/pages/history/estate_history2.asp Accessed 11/12/08)

5.3. The Conflict of Landuse: This is Agricultural Land.

Underlying much of the conflict is the issue of landuse. Locals believe the estate's land has agricultural potential and it is being wasted. Agriculture is a clear statement of man's domination of nature, a historical battle dating from the Neolithic forest clearance. Since then man has been progressing, improving the efficiency with which they exploit the land. Such ideas of human progression of agriculture are important to the locals:

"I think that, you know, for hundreds of years people have tried to improve agriculture ... various ideas came up, crop rotation and all the rest of it, to get the optimum amount of production from a patch of land. And that's the peak that we've reached now, and it seems to me that this rewilding scheme is taking us right back to the very beginning again, to almost prehistoric age."

(A)

Agriculture is about increasing production so that nature will reach its full productive potential and we have reached the climax. This idea is so ingrained within locals that one assumed the only valuable aim for the project would be for it to further our techniques of production:

"Where's the profit in knowing? Will we find out some wonderful new method of actually getting more production out of the land?" (A)

If we are not continuing on the quest to produce then what is the point? Local people cannot understand why Burrell would wish to revert from a landscape we have finally mastered. Rewilding suggests agriculture does not show a steady progression of improvement to nature and land but the gradual destruction of it. These two polar viewpoints result in contrasting beliefs as to how land should be used. For Burrell the greatest benefit comes from rewilding, whilst locals believe the land is best used for agriculture:

"It's not like it's scrap land, it's not scrap land, and yet he's turning it into this wilderness." (C)

"Most of them [farmer friends of E] were quite anti to be honest. Yes. A lot of them cannot believe that he's got all these thousands of acres and he's done what he's done with it...to see this perfectly good ground, just being abandoned basically "(E)

"To my mind your ex arable land hurt my sensibilities" (Letter 2007)

The land was continually described as 'abandoned', a place once used but now left and no longer cared for. D explained the disappointment in the community as they saw good land poorly managed and neglected. D told me the countryside needs managing and Burrell is failing to fulfil his role. He knows Burrell's arguments but said firmly he just cannot escape his assumption that the estate is agricultural land with all the implications that has. Such fundamentally different ideals of man's position with nature polarise opinions.

These viewpoints are illustrated by the debate concerning weeds at Knepp. Weeds are defined by perception as "a wild plant growing where it is not wanted" (Soanes & Hawker 2006 p.1177). The discourse of farming has entrenched a number of species as serious weeds through the 1959 'Injurious Weeds Act'. For Burrell weeds cannot exist because all nature, if produced by natural processes, is welcome. This approach clashes with clearly defined, local agricultural concepts of injurious weeds:

"they've been told a lot about noxious weeds for so long...they've been told that all this ragwort kills hundreds of animals every year and if you let it grow across, then you're actually being a bad farmer and you need to stop it and bring it under control...I think people have been force-fed a diet of how bad weeds are" (Whitbread)

For D the ragwort and thistle covering the estate is a "disaster" (D) and a "great disappointment" (D). Kampf and Burrell share a completely different understanding:

"you will find thistles are extremely important for the butterflies...ragwort is very specific for the, we call it the, St. John's Moth" (Kampf)

In line with the discourse of rewilding, Kampf sees the role of thistles and ragwort within an ecological system and believes they should be allowed to flourish.

The contention that this is agricultural land extends beyond the idea that it must be utilised and productive, it must also be considered as agri*culture*. The locals wish to live in a traditional, agricultural, rural cultural landscape. Knepp's new vision threatens this:

"Shipley Parish reverberates with the past...And this particular Estate farmed by this particular family has been a model estate until only a few years ago. It was the pride and joy of the Burrell family" (C)

Historically the inhabitants have looked towards the estate as the traditional centrepiece of their rural idyll. It is surrounded by small traditional villages where inhabitants use the estate for horse riding, shoots, polo, functions and walking. The feeling is spreading that the estate is "less open now" (D) and that free roaming wild animals will prevent traditional access in the future. The estate is threatening the rural lifestyle beyond its boundaries:

"The publican at the corner was very concerned about the deer fencing...he's got a very nice pub garden and people love to go in there as they have done for years, to sit in the Countryman garden and admire the view...are they going to come and look at a fence?" (C)

There is a fear that a way of life is slipping away. Many of those in the area have immigrated from London to gain this lifestyle. I was told of investment bankers who have chosen to retreat to a simpler, luxurious rural life. The countryside is constructed as a place where people relax away from city stress and a place to stop and observe nature:

"watching the harvest coming in two years ago, it was even more beautiful looking at the fields of corn and barley growing out there, watching the tractors ploughing in the winter and sowing the seed and watching the green shoots coming up in the spring, it's been a lovely, beautiful place to live...we've got dead weeds growing there now...the colours are not the same, watching the woodland colours change from bronze in autumn and the leaves falling and the spring colours coming up" (C)

Local people have a genuine love and appreciation for nature. They wish to see an aesthetically pleasing, healing nature within a rural setting. They do not want the wild, free, unpredictable nature Burrell is releasing. The estate and its surroundings have historically constructed a traditional, rural idyll where nature thrives under guardianship. The locals do not want to exchange this discourse for rewilding.

6. Traditional Conservation

Although conservation biology has undergone a paradigm shift, many of the environmental agencies are still working within the old paradigm. As a product of the past discourse, these agencies are struggling to reconcile the new ideas. The strength and power of the past discourse within the agencies affects their reaction to rewilding.

Pulborough Brooks, a RSPB site 15 minutes drive from Knepp, reveals the RSPB's traditional conservation. The site is a Site of Special Scientific Interest (SSSI) and a Special Protection Area (SPA) and the focus is a list of specific birds. The site has objectives and a management report (RSPB unpublished) which outlines the species and the direct management that sustains them. Whitbread suggested these conservationists should be referred to as 'imperialists of nature'. They want to control and with sufficient funding they have the mechanisms and tools to deliver a desired target output. When discussing ideas of rewilding, which would involve restoring the river across the currently maintained wetland, with a representative, the assumption was this would help specific species:

"There is, however, potential for re-connecting the river to the floodplain...which is likely to provide good feeding opportunities for wildfowl" (RSPB)

The power of the previous discourse is so strong that the representative only considers rewilding as a new technique to meet current aims. However, rewilding poses a fundamental challenge because it suggests management for targets should be eradicated. Rewilding allows nature to decide which species survive and where. If rewilding was to become the new approach at the site, without river restoration, the area would become a dryland site. This would transform the list of species that thrive there and endanger the rare and threatened species for which is it a haven. The conservationist explained a similar conundrum:

"the river is tidal so it's got quite a heavy salt influence and the sub plane is fresh water and that sub plane is a protected habitat so it's SSSI and so therefore we're not supposed to destroy it in any way or damage it, but what should be there is salt marsh which is equally as important if not more rare. But then, you know, what happens to this and everything you've got there.

There's loads of red data beetle species there ... So it's not just what's there and is it rare, be that the species or the habitat, it's, okay what's there? Is it rare? Should it actually be there?" (Conservationist)

If an important area is protected but as a habitat different to what it would naturally be, should rewilding occur? You gain one environment but lose another.

"I can understand that perspective of conservation organisations who don't adapt because they do have specific interests to look after and once you have that specific interest, you don't want to risk that...if you've got high quality existing nature reserves then it's actually a bit of a risk to actually just say, 'Well, we'll let it all go to nature' "(Whitbread)

At Pulborough Brooks I was told:

"species need specific habitats...we leave nothing to chance...as soon as you take your foot off the gas everything reverts." (RSPB)

The nature that thrives there, including a bird found at only 2 other sites across the Arun Valley, needs the RSPB. The RSPB view it as their responsibility to continue the necessary inputs to keep propelling the system. For them, the risks of rewilding are too high; they risk losing all they currently have. In one sense the RSPB are doctors, their role is to use their medicine and knowledge to cure and sustain a static nature. The RSPB must also consider their customers. As Emrich and I looked at the pond Knepp have rewilded he told me:

"you can see why they [Pulborough Brooks] do it, imagine if you had so many visitors coming who had paid, you can't show them this –field, few rushes and no birds!" (Emrich)

Without the target orientated approach there is no guarantee a project will meet the demands of the public.

Whilst the RSPB cannot incorporate and to an extent do not want to incorporate rewilding into their agenda, Sussex Wildlife Trust (SWT), on the other hand, are:

"A lot of our nature reserves have specific interests and we manage them in the traditional way, and that's how we're going to carry on doing it, but increasingly we are going over to rewilding in particular places" (Whitbread)

Tony Whitbread, Director of SWT, was an early proponent of rewilding in Britain (Whitbread & Jenman 1995). His personal passion is pushing the rewilding agenda but there are deeper reasons that SWT can consider rewilding. These stem from the fundamental ethos of the organisation, as their logo and slogan reveal:



"a million voices for nature"
Figure 11: RSPB logo and slogan.
(Available http://www.rspb.org.uk/ Accessed 11/12/08)



"Taking care of Sussex"
Figure 12: Sussex Wildlife Trust logo and slogan.
(Available http://www.sussexwt.org.uk/index.htm?id=default Accessed 11/12/08)

The RSPB is 'the Royal Society for the Protection of Birds'. The logo reveals nature's million voices are the songs of birds. Fundamentally, the RSPB cares for birds and not nature in a wider sense. Therefore, it cannot undertake a conservation strategy which will encourage nature at the expense of birds. SWT has a wider remit towards wildlife and the natural health and wellbeing of Sussex. Their flagship projects include creating a 'living landscape' (The Wildlife Trusts 2006) across the Southeast and the 'West Weald Landscape Project' (Whitbread, T. 2004). Rewilding will not only aid SWT to reach a wider range of wildlife but, due to its visions of big nature, it helps tackle the issue of caring for wildlife across the county. Unlike the

RSPB, where rewilding cannot be assimilated into the discourse, SWT are "moving, not loosing" (Whitbread). SWT have 2 sites, The Menns and Ebernoe Common, which, by chance, had no prior management so were ideal places to begin rewilding. SWT are retaining their traditional conservation but their wider spatial and ideological remit allows them to test rewilding.

7. The Government

The past conservation discourse is encouraged, played out and reinforced by government policy. The UK has a complex structure of environmental governance designed to meet specific preconceived needs.

"you've got the national government, and so DEFRA...that's the department that's responsible for agriculture and environmental policy...at regional government we've got SERA...they produce the South East Plan...in West Sussex we've got the County Council...responsible for highways...waste and minerals and...education...in West Sussex we've got seven districts and boroughs...responsible for planning...Natural England and the Environment Agency...they're branches of national government...they're what we call Quangos... responsible for government policy and for advising government and us on environmental issues." (Councillor)

Particular problems are handled by set departments in specified ways. The project at Knepp is not conventional therefore I asked who they would liaise with to develop the project:

"I don't know the answer to that. Natural England are probably the people that would, would they answer that? It's different because of the changes that have happened with DEFRA. It would ultimately, it comes under DEFRA" (Councillor)

Who Knepp needs to interact with is complicated. The local council were unaware of Knepp and did not know who to refer me to. It proved impossible to talk to an informed person at DEFRA due to a high rate of staff turnover. Legislation fixes discourse which inhibits Knepp as they attempt to work with the existing framework:

"Where you're trying something innovative...you've got the forms to fill in and the forms just don't fit what you're trying to do...Because it's not the normal run-of-the-mill type project, you know, trying to fitting it into the policy is pretty difficult" (Councillor)

The greatest challenge such confusion poses for Knepp is securing funding for the future because Government schemes are target and landscape orientated:

"So they've paid him to restore grassland which is now becoming woodland and they're actually talking about whether or not they can support him, whether they need to actually ask for the money back or where he fits because he's actually going towards forestry but he's not quite there because he's not planting woodland...So he's kind of stuck at the minute between two grant schemes" (Conservationist)

Currently, the environment is handled commercially, funding pays for the production of a specific, target defined landscape. Whilst funding is available to produce then manage a static grassland or woodland, allowing succession towards non-specified landscape does not meet requirements. The current structure is based on another paradigm unaligned with Knepp's vision.

The involvement of Natural England (NE) has been key at Knepp, although, they face challenges as a 'quango'.

"EN [Natural England] has so little available money and are rather ring fenced at what they can do and be seen to do. As I said yesterday they are rather more people involvement orientated at the moment...and not much into working with landowners outside of the SSSIs" (Email 2002)

As a government body NE are embedded in the legislation of other paradigms and schemes: SSSI, biodiversity action plans, targets, endangered species. I spoke to Keith Kirby from NE about their involvement in rewilding.

"It [NE] couldn't be involved in a project going against government policy...if we're doing something which really was creating adverse publicity then again we should see it necessary to rein our input in...At the moment I don't see that as being a problem as far as rewilding is concerned. It means we have to be a bit more careful about things like, for instance, the wolf...but we are, as you know, we are not proposing to do it" (Kirby)

NE, like the RSPB, has to meet public needs. In our discussion Kirby was conscious of the issues surrounding rewilding, the limitations, clashes with the public (access,

weeds etc) and the extent to which you can 'reasonably' go within current frameworks. Whilst this is not a problem with Knepp, it could be in the future if Burrell pushes the frontier beyond NE's boundaries. NE must meet government aims:

"The main thing is will rewilding provide value for money ... a lot of our objectives are going to be better met through controlled management" (Kirby)

NE are excited by ideas of rewilding, however, the current discourse has power over what they can do. If there are "pots of cash available" (Whitbread) then they will be directed towards Knepp, historically this has been in the form of research money. Casting Knepp as an ecological experiment has helped gain funding. This focus of NE is summed up in the statement on the reverse of the Business Study and meeting minutes:

"English Nature fully support the Knepp project, and eagerly awaits results of the forthcoming research" (Statement on the reverse of the Business Plan 2007)

"English Nature may not be the agency to fund the project, they may be in a position to fund the research/application" (Appendix 3: Minutes for the Wilderness Meeting at Knepp 28/03/03)

The previous discourse of conservation has disciplined a government framework to ensure its reproduction. Rewilding is challenging this framework and slowly new structures or ways around existing ones are being produced.

8. Conclusion

Since the Neolithic clearance of forests, man's relation to nature has dictated its expression across the landscape. Increasingly discourses of conservation are selecting and producing our future nature, often under the guise of preserving a truly 'natural' environment. Within the current context of mass extinction and climate change, understanding movement within conservation is paramount. Rewilding is of specific interest not only as a new paradigm in conservation but because it involves the surrender of human control to the governance of nature. One can question whether, with nature in charge, rewilding is the key to producing a 'more natural' nature? Therefore the discourse of rewilding has been defined, challenged and its limits explored using the Knepp Wildland Project as a case study.

The vision of rewilding at Knepp is of a new nature, a big nature, a wild nature; a space where nature is emancipated and natural processes, not humans, dictate. This vision emanates from the vibrant, bold, nature-obsessed estate owner Sir Charles Burrell. His dream aims for an Arcadian utopia through nature's self-healing by restoration and regeneration. However, tensions, contradictions and negotiations lie beneath this superficial rhetoric. Nature does not have control. Burrell allows nature to operate on his terms and within his limits. Animal welfare legislation, local infrastructure, funding and tax policies also constrain the fulfilment of the dream. Burrell is exploiting the land for human benefit through low cost production of prime, organic meats. Theoretically, with nature in charge, the dream of rewilding has no targeted landscape, yet, Knepp has a range of aims including increased biodiversity and a parkland appearance. Future nature at Knepp will not solely be the result and expression of nature itself. Rather, it will be the result of the tension and interplay of the power balance between humans and nature that rewilding creates.

The discourse cannot be considered in isolation: its limits must be challenged. Research found local people have different constructions of nature and what is natural. Firstly, they struggle with the multiple meanings within the term 'wild' and the imagined level of danger this poses. Secondly, they dispute this new landuse. Locals believe it is our responsibility to use such 'agricultural' land to produce. Thirdly, locals want the estate to reinforce, as it has in the past, their construction of a traditional, agricultural landscape where an estate, with associated parkland, is the focus. Locals view the new nature as neglected, abandoned farmland. Locals believe

the 'wild' Burrell was hoping for, has not developed nor is going to develop. In reality the same landscape is imbued with completely different meanings stemming from alternative constructions of nature. Such clashes limit the extent to which rewilding will shape our future nature.

A similar negotiation of traditional paradigms with this new discourse is occurring within conservation organisations. Some institutions, such as RSPB and the government, are trapped within the power of the old paradigm where new ideas cannot be incorporated however much individuals may support them. NE is finding alternative and unconventional ways to support rewilding and SWT includes the ideals of rewilding wherever possible. Past paradigms have created an existing framework of conservation institutions. Consequently, full incorporation of rewilding the discourse will have to force change, creating its own reinforcing institutional mechanisms. Yet, it remains to be seen whether it has the power to overcome the current fixed ideas and shape our future environment.

The characteristics of future nature will be the result of the battle of discourse within conservation biology. This dissertation has shown that in practice rewilding does not emancipate nature and that projects which move towards this encounter resistance from other discourses. In the future we will not see one construction of nature but a patchwork of productions emerging from the negotiations, tensions and contradictions of the array of discourses of nature. I embarked upon this study with a naïve belief created by the discourse of a Geography degree. That is, as we look forward we should want more nature, a truer nature. Perhaps rewilding could be the solution to this dilemma. My dissertation has shown this is not what everyone wants nor will it be realised through rewilding. Rewilding at Knepp is realising something very different, something more interesting. As Burrell steps back and observes, appreciates and explores nature at work, his understanding of the land is deepening. The secrets of nature and its surprises are diffusing into him. He is gaining a spiritual knowledge or a symbiosis with nature, an understanding and connection which will allow his stewardship to be increasingly tuned to natural rhythms. As locals suggested, handing back power to nature, bringing the wild back to Southeast England is not practical and not feasible. However, learning from and carefully working with nature is both practical and achievable.

There is scope for further study within rewilding in the UK, however, it would aslo be interesting to repeat this study at the Oostvaardersplassen. During my brief

visit to the Netherlands I gathered the impression that the discourse of rewilding had greater power. The Oostvaardersplassen seems to emancipate nature to a greater extent than Knepp, and the governmental approach to the environment is producing ideas analogous to rewilding. How the challenges differ, how the discourse is encouraged and is arguably more successful would provide valuable information for developing projects such as Knepp. It would be interesting to compare how different national cultures are conducive to the new nature of rewilding. Kampf made many interesting comments on the differences between cultures, though fascinating they were beyond the scope of this dissertation. Such considerations would be relevant as we consider the future global environment as a range of cultures each representing many discourses come together to tackle environmental challenges. When such conflicts exist on Knepp's small scale how do such ideas begin to play out on an complex global stage?

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Appendix 1:

Comparison of CSS and Wilderness Approaches appended in a questionnaire Knepp undertook.

Appendix Ia: Comparison of CSS objectives with the implications of a wilderness approach

CSS objectives	Implications of a wilderness approach
To take the park area out of intensive arable production and lay out a new deer park in its place.	Wilderness similar in structure and appearance to a deer park
To maintain the economic viability of the land by entering the new deer park into a ten year management agreement with run by DEFRA through the Countryside Stewardship Scheme.	DEFRA support should retain economic viability of the approach.
To maintain and enhance the picturesque qualities of the landscape as an appropriate setting for Nash's castellated mansion, whist at the same time respecting the historic and aesthetic basis for its layout.	Similar in structure and appearance to a deer park and may represent an older historical link to a landscape prior to the construction of the mansion.
To conserve and restore, in accordance with available archival and field evidence, historic features which contribute to the historic and scenic value of the site and which complement the use of the site as a deer park.	Scenic qualities of wilderness similar but less predictable than a deer park, may provide a greater degree of vegetation diversity with more ecological and scenic interest.
To restore Knepp Mill Pond in order to re-establish its role as the major feature within the setting of the castle and to safeguard its future as an important site of nature conservation interest.	Can adopt the same objective.
To improve the water quality, landscape and ecological value of watercourses, ditches and ponds through appropriate management.	Similar objective through naturalistic management. This may mean utilising the activities of certain animals to create a diversity of wetland habitats rather than (or as well as) the direct manipulation of vegetation and watercourses. The objective can be retained but the method of implementing management may be different.
To conserve surviving archaeological features which provide evidence of the history of the site and its use over the centuries and incorporate these into the layout of the deer park.	A wilderness approach can be designed that will allow the conservation of these features.
To re-establish permanent grassland within the area of the historic parkland and throughout the other areas of the new deer park, maintain the parkland as grazed pasture and actively manage it to improve its ecological diversity.	A wilderness approach will achieve the same objective either through direct creation of grasslands as part of the establishment of a wilderness or indirectly through the activities of naturalistic grazing.
To reveal and enhance views and vistas across and beyond the park whilst at the same time screening out any intrusive views.	Most of the project will allow natural dynamics with views opening or closing with long term variation in grazing pressure, but specific views can be retained or closed through direct action within a wider naturalistic approach.

Appendix 2:

Suggestion of limits of acceptable change appended in a questionnaire Knepp undertook.

Appendix IV

Limits of acceptable change

Introduction

This will be based on the identification of attributes that, it is considered, should be kept within certain limits, deciding what the limits should be and then recommending action should limits be approached or exceeded.

(Vague suggestions only – needs discussion! – I'm not sure about any of these ideas, but I am trying to find a structure that will help issues to be identified and decisions to be made.)

Attribute	Limits	Action and comments
	· · · · · · · · · · · · · · · · · · ·	
Woodland cover	>20%, <60%	Above limit – increase grazing and browsing, Below limit – remove grazing pressure Changes in grazing species mix?
Woodland flora	Use bluebell cover as indicator. No less than 80% of current extent.	Preference order: Reduce overall grazing pressure. Fence and restrict grazing access.
Parkland cover	40-60%	Above limit reduce grazing pressure Below limit – increase grazing pressure Changes in grazing species mix?
Establishment of open grown trees and groves of trees	Canopy cover estimates?	Consider changes in grazing animal species to alter regeneration potential
Veteran trees	Identify significant trees and ensure no lasting damage	Preference order: Reduce overall grazing pressure Fence to encourage scrub regeneration around tree. Close fence to protect individual tree.
Noxious weeds	<5% of estate	Near or above limit (preference order): Alter grazing pressure Cut, roll or top Localised herbicide
Rhododendron	Restrict to limited acceptable areas for landscape.	Outside these areas, cut and herbicide
Poaching of ground	<10% of area for < 3 months per year (guesswork!!)	Above limit – preference order: Reduce overall grazing pressure Remove stock from effected area.
Dead animals	< 5 dead large mammals on site. > one dead animal on site	

Appendix 3:

Minutes for the Wilderness Meeting at Knepp 28/03/03.

Charlie Burrell

From: Jason Emrich
Sent: 03 April 2003 12:25

To: Charlie Burrell

Subject: Wilderness Meeting.doc

WILDERNESS MEETING - KNEPP

28th March 2003

In Attendance:

Charlie Burrell, Julian Smith, Ted Green, Jill Butler (WT), Tony Whitbread (SWT), Jason Emrich, Richard Smithers (WT), Dr Chris Edwards (EN) & Louise Hutchby (EN)

- 1. Introduction into Global Wilderness' by Jill Butler. Slides of Oostravdasplasen (OVP) and around the world by Ted Green
- 2. Relevance of the "Vera" model to the Sussex weald by Tony Whitbread

3. Discussion

- Chris Edwards: Within English Nature there is a debate on the relevance of Vera's theory ongoing.
- Important for CRB to clarify his objectives and decide what type of landscape he wants on the estate? Whether a working landscape or near natural ie throw everything into the pot and see what happens.
- Richard Smithers: thought that OVP is a one-off. Valeaway(?)(VW) is different a 20 year vision 25k ha in Holland turning land into a wilderness. VW would be a better model than OVP because it is not starting from a reclaimed landscape without seed sources etc.
- Julian Smith: vision is to let fecundity determine population except where large numbers are likely to lead to mass starvation.
- Richard Smithers: At VW they try to pre-empt a population explosion and manipulate population. Danger is that if you set out to control, then population will always be managed at too high a level (eg red deer in Scotland)
- Charlie Burrell: objectives expecting it to take a long time to achieve aims.
- *Ted Green:* would like landowners to benefit from produce timber etc. I think the rest of us were sceptical about the relevance of this.
- Chris Edwards: English Nature's interest = the biodiversity output. Is Vera relevant?
 big debate going on Knepp project could be a relevant experiment.
- Why isn't Countryside Agency/FC here? Julian Smith spoke to Ewan Cameron who felt that this was a Defra thing. Chris Edwards thought Countryside Agency very relevant land bridges = landscape implications = Countryside Agency.

16/04/03

- Defra do have examples of pasture wood projects in the Sussex Weald but nothing on this scale.
- Do not worry about the detailed constraints as this will hold us back. Need clarity on what it is we are trying to achieve what is the desired landscape?
- Ted Green: thorn oak ancient trees.
- Chris Edwards what if this doesn't happen? Do we plant / shoot / intervene etc
- Richard Smithers: What happens will be determined by the soil fertility and floristicity – it will definitely be biodiverse but numbers of animals and vegetation will determine. At OVP no seed sources etc.
- 3. Tour of Park and extended area.

Lunch

4. Summing up by English Nature (Chris Edwards)

Whilst English Nature may not be the agency to fund the project, they may be in a position to fund the research/application process and possibly fund a project officer to put the whole thing together.

Essential that CRB's objectives are clear e.g.

- Totally wild as per OVP
- Semi-wild including culling & other intervention

Chris Edwards to talk further with Tony Whitbread. He said that the Vera theory is a hot debate at present and English Nature's official position is probably that they don't believe it, but the "Knepp" project could be an excellent experiment to help prove the theory in the UK.

Richard Smithers felt that private funding may be more appropriate than Defra.

16/04/03