

landscape  
research  
extra 67

November 2013



Copy deadline for  
LRE 68  
January 25th, 2014

**Contributors**  
Sam Staddon  
Helen Murray.  
Jonathan Prior  
Andrej Hudec &  
Libor Novak  
Owen Manning  
Philip Pacey  
Marcus Leibenath  
Graham Fairclough  
Ros Codling  
Gareth Roberts  
Bud Young

## *OLIVERAIE DE SFAX*

### **The Cultural Landscapes of the Tunisian Sahel.**

*In 2012 Gareth Roberts was invited by Younga Solidaire to help prepare a development plan for tourism and sustainable development for Mahres a small town of about 25,000 in east Tunisia. In this report he describes the cultural landscapes of the Sahel region in which Mahres is situated.*

The Sahel region of north eastern Tunisia is a land of olive trees and ancient rural villages. Both trees and villages reflect a landscape that has changed dramatically in the past 150 years or so and shows signs now of further profound social and economic malaise as globalisation and climate change seem set

to bring about new challenges for its people.



Stretching for over 200 kms north to south the Tunisian Sahel marks a transition zone climatically between the relative humidity of the country's northern Mediterranean coastline and the semi-arid and desert landscapes of the Sahara. The Sahel is almost all below 100 metres and is a predominantly featureless plain peppered with inland saline pools (chotts) and extensive marshes along the coastal fringes. The region has a very rich history reflected in its architecture and diverse cultures of Berber, Roman and Arab civilisations. Some impressive monuments are to be

found such as the extraordinary amphitheatre at El Jem that rises starkly from the flat Sahel landscape. Accommodating over 40,000 people in its day, this amphitheatre is the single most spectacular Roman monument in Africa.

### Olive groves and the Sahel

It was the Romans who first recognised the potential of the Sahel for olive production. After defeating the Carthaginians in the Punic Wars Rome turned its attention to exploiting the natural resources of the province they called Africa. Their primary interest in Africa was to produce grain to feed their expanding empire while at the same time to capture wild animals for use in their amphitheatres. Their skills as water engineers allowed them to construct massive subterranean cisterns to store water for irrigation and facilitated the transformation of areas of the Sahel from a grain landscape to one of olive orchards.

Over 97% of world production of olive oil now comes from this region. Good quality olive oil attracts connoisseurs and there is a wide consensus that the Sahel produces olive oil of the very highest quality. Sfax, second city of Tunisia, is the principal city of the Sahel region and was founded on olive oil production. It has become a highly distinctive physical unit in a cultural geographic sense and is recognized as such in the impressive *'Atlas des Paysages de la Tunisie'* (2009). The character of the landscape is highly regularised in its planting design, harvesting and overall management. It is a landscape that reflects the fine tuning of a production process in a dry farming environment. Its unique cultural landscape reflects a symbiosis of man and his environment or what the French more succinctly describe as *'le savoir-faire paysan'*. The growth in interest in more systematic management of olive groves can be traced from the French colonisation of north Africa in the 19th century, though most groves were planted between WW1 and WW2.

Olive groves now extend to over 1.4 million hectares (almost three quarters the land area of Wales). Trees are planted at regular intervals of about 24 metres apart and harvested every second year. The longevity of the olive

trees in this region is encouraged by a pruning technique similar to pollarding that gives the trees their distinctive toffee apple shape. Another common feature is the vigorous weeding to help minimise water loss to tree roots and increase the amount water made available to sustain the tree through the hot summers. Stones are placed in a wide circle around the weed free patch beneath each tree to form a shallow

using combs traditionally made of hollowed goat horns but now of plastic, appended, thimble like, to their fingers. The fruit fall onto wide aprons of goat hides sewn together and spread out below the trees to facilitate the harvesting. Each tree growing in the Sfax region might be expected to produce about 50 kg of olives.

The harvested olives are taken to mills



depression which helps moisture to move into the root zone.

Harvesting takes place in November. It has to be done by hand and is highly labour-intensive. Tunisians dislike this work so migrant workers move into the region in early autumn to prepare for the harvest. Teams of seven will work together to scour the trees of their fruits

in nearby towns. Most of these mills use mechanical presses dating for the early 20th century and esparto grass mats for filtering oil into different grades and qualities. Olive production is by far and away the main export earner for the region. Most is taken to the main markets at Sakkiet, Ezzit and Guermada then onto Italy and other European countries. Sfaxian olives or

zeitoun to give them their Arabic name are highly flavoured and the oil produced was once considered too strong in taste for European palates so historically Tunisian olives were used to produce soap. Today Sfaxian olive oil is highly prized for its flavour and soap and animal feed is a low grade end product.

The production process produces huge amounts of waste. It is estimated that of the two million tons of olive oil produced around the Mediterranean annually 9 million tons of waste is Generated — see black slurry lagoon below. Strict waste management rules governing production in the countries of the European Union have reduced the environmental impact of olive oil mill waste water and encouraged the production of bio-products into the bargain. But such controls are virtually non-existent in Tunisia and examples of irresponsible disposal of olive oil waste abound.

Photographs — see facing page, taken in November 2012 at the olive oil press in the town of Mahres (50 kilometres south of Sfax) show the main stages of olive oil production. Processing plants



Flat roofed whitewashed village houses were carefully designed to maximize the capture of any rainfall into storage chambers beneath them. They are typical of the Sahel. Streets in these towns are narrow and houses, bounded by high walled gardens normally extend to less than a hectare. They are typically planted with an outer fringe of almond trees within which might be found figs, apricots, vines, apple, pear, peach, plum, pomegranates and

The future character of the Tunisian Sahel and its cultural landscapes is uncertain. Over production of olives has brought about a slump in oil prices and global warming further challenges the long term viability of the region's farming economy. Traditional houses and their walled gardens are being abandoned, youth unemployment is very high and the potential to create new job opportunities in tourism is hampered by continuing political instability in the country. Despite the best efforts of *Younga Solidaire* to stem the economic and social decline in this region, Mahres, seems set to remain one of the principal embarkation points for illegal immigrants prepared to risk their lives crossing the Mediterranean in search of a better life in Europe.

## GR

### Notes

*Atlas des Paysages de la Tunisie.*  
Published by the Ministère de l'Équipement de l'Habitat et de l'Aménagement du Territoire, Direction Générale de l'Aménagement du Territoire  
March 2009.

MEDOLICO is a recent initiative funded by the EU through its 'Cross Border Cooperation Programme' based at the Jordan University of Science and Technology (Irbid, Jordan) encourages the sharing of best practice experience in the management of olive oil waste in non-European Mediterranean countries.



such as this are to be found in all the main towns of the region.

### The decline of traditional villages

Before the establishment of co-operatives and large scale olive oil production in Tunisia in the 20th century most families would have an olive tree or two in their garden (*jnein*) for their personal consumption. Large scale olive oil production led to the replacement of olive with other crops such as almonds.

occasionally citrus trees. The landscape of these settlements is dominated by these houses and their enclosed gardens. They are productive of vegetables and flowers as well as fruits and are designed and managed to conserve the limited rainfall. *Jneins* contribute to the character of one of the most prosperous regions in southern Tunisia. They are the product of much hard work and have produced lush havens of colour, prosperity and commerce in environments that were extremely hostile and naturally poor.

## HOT DAY ON NORTH HILL

Sat 20 July 2013

by Owen Manning

Unwise it may be to head for the hills with temperature racing into the eighties under a cloudless sky, for one of equivalent age still sun-struck from a scorching week in Snowdonia. But even in this relentless heat the heights beckon, and once more I find myself climbing steadily via shaded steps and green tunnels up on to glaring hillsides. Upwards still I go, through dry grasses and bracken gasping with heat (them not me: I'm OK so far) to reach Lady Foley's Drive where it loops beautifully around Malvern's northern hills.

Here I sensibly turn to stroll homeward along the contours, grabbing occasional shade — a rocky ledge, a stunted tree — to munch, drink, and meditate. Already the view is remarkable: not unlimited, for hills still enclose on either side, but this one quadrant seems to stretch for ever into distances dim and hazy with heat. The full panorama would appear from the top, of course.....

A grassy path mounts skywards to my right, softly enticing; inevitably my feet draw me to climb into the glare of the sun once more. A warm wind blows out of a huge hot sky, cloudless to the horizon, and now the unfolding view is sensational. Worcestershire's fields, woods and hills spread below on every side, merging somewhere beyond with half of England and Wales — though not to be seen today, not under this sky. The landscape seems as though

flattened by heat and light: unreal, abstract, the distances without meaning.

On this same hilltop a young woman once reached out her arms to me, a stranger, and cried "Don't you thank God for this?" But that was on a day of flying cloud-shadows and gleams of sunlight, the huge panorama vividly alive, solidly three-dimensional, inexhaustibly rich in detail. Could today's vague flat version have inspired such rapture?

The sheer extent of it is exhilarating, but not enough to hold me. I leave the summit to descend the other side — and here unexpectedly is texture and richness: here the fierce glance of the sun is throwing a sheen of silver and bronze over dry grasses waving in the soft wind, and through them my path winds down towards the saddle, and the Beacon looming grey and ghost-like under the hot unbroken blue. The contrasts are magical, an unlooked for reward for the climb. And it is now, as I carefully descend (too easy to stumble here), that the featureless sky itself does something extraordinary.

Concentrating on my feet I am aware of a white flash — and suddenly above me is a large glider like a giant albatross, so close it seems almost part of the hillside, yet wonderfully white and light: the most beautiful glider I've ever seen, whooshing silently as it floats past me on an unseen flow of air. Startled I watch it bank steeply behind North Hill, a white wing upwards, to return effortlessly along the same aerial pathway, slowly diminishing till it disappears into the blue void beyond the Beacon. In happy wonderment at this gift from the sky I continue down, already in my mind trying to describe the mysteriousness of the great white bird - machine as it appeared out of nowhere, breezing along as though flying had never been a problem so why all the fuss.....? Suddenly there it is again: just above my left shoulder as before, whispering along its aerial corridor, spiralling around North Hill and back as though showing off (to me personally?), before vanishing once more into the distant blue.

Well: once was amazing, twice more so; it won't be back of course. But intently I watch the sky rather than my

feet as I descend; nothing breaks the blue expanse — when unbelievably it's there again, precisely as before, like a silent explosion of matter from nowhere..... Almost it seems as though focussed on *me*, perhaps the only person on the hillside on this hugely hot summer day; a memory comes of predatory birds on Scottish islands as once I saw them, Great Skua and Greater Black-backed Gull, circling round eyeing me, choosing their moment. But the glider has sailed on its way, and lower now with trees rising around I do not see the rest of its flight, nor does it reappear, hunting — as far as I know, for now a wooded coombe has drawn me deep into its cool dark tunnel.

And here one more event awaits — if you can call a mere feeling an event — for as I dizzily descend I am brought to an abrupt halt, overwhelmed yet again by intense sensation. Sound, light and movement are suddenly all around me in the valley: trickling of water from an emerging stream, a roar of air in the upper tree canopies, sun flashing through branches and fluttering leaves. High on the hillside, in the sunlit realm, trees are swaying as in a great wind. After all that has gone before this coming-together of so much is like a spell; for some while I cannot move. An old literary memory comes to me, of travellers in Greece gazing across a wide tree-filled valley, noting with interest, then alarm, then mindless terror the slow stirring of the trees on a line straight towards them, as though some unearthly power were moving purposefully across the valley.....

*Panic*, I think that story was called, and it is clear what pagan spirit was being evoked. For me today there has been no fear; food for thought and memory, yes — solid landscapes made unreal by great heat under an empty sky; hot hillsides turned to magic carpets by sun and wind; sudden silent appearances from the blue, almost as though for my benefit; a spell-binding rush of sound and sensation in a deep wooded valley. Nothing extraordinary — unless we admit how far from ordinary the world around us can be, given a few surprises.

**OM**

The views and opinions in this publication are those of the authors and the senior editor individually and do not necessarily agree with those of the Group. It is prepared by Bud Young for the Landscape Research Group and distributed periodically to members worldwide as companion to its refereed main journal *Landscape*

Research.

Editorial enquiries:

**Bud Young,**

**Airphoto Interpretation,**

26 Cross Street

Moretonhampstead Devon

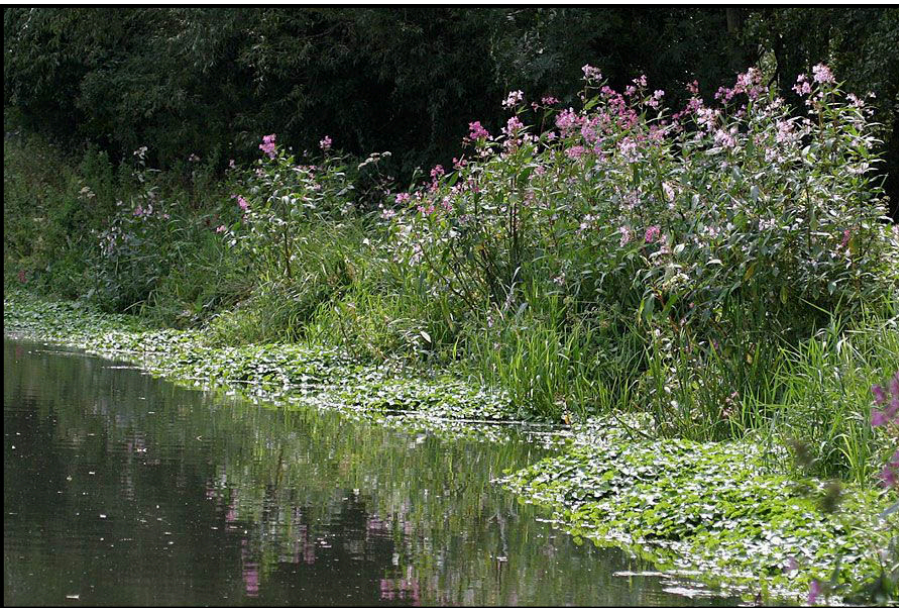
TQ13 8NL or emails to

**young @airphotointerpretation.com**

## SOME THOUGHTS ON CONSERVATION WORK EXPERIENCE

by Ondrej Hudec & Libor Novak

We are 22 year old university students from Prague who in July this year travelled to Wales to gain some practical work experience with the Snowdonia Society — an NGO and environmental watchdog in the National Park. We study Political Science and Land Management respectively and take an active interest in green politics and environmental conservation in the Czech Republic. Both of us had visited Snowdonia before and already knew quite a lot about the National Park. We decided to volunteer because we wished to develop practical skills, and learn more about approaches to environmental conservation and landscape management in Wales.



We had learned about the voluntary work placement through Gareth Roberts, a friend of our parents and a Director of LRG. After our three week work placement we shared views with Gareth about our experience and why attitudes to landscape can change in relatively short periods of time and how these attitudes and approaches can be different between countries within the European Union. It seems that cultural differences remain more potent than policy positions when it comes to analysing our attitudes to nature and landscape.

During our three weeks we worked with staff of the National Park and the recently formed Welsh Government agency “Natural Resources Wales” on two projects. Both involved us helping to reverse mistakes made by earlier generations in managing their environments.

The first project involved us in clearing Himalayan Balsam (*impatiens glandulifera*) which is to be found on waste ground and river banks throughout the National Park. It is a very invasive species tolerating low levels of light and very successful in shading out and smothering native plants. It grows annually up to 3 metres in height and produces pods containing hundreds of seeds which when ripe in late summer burst explosively. For this reason our clearance work was scheduled for early summer before the pods ripen. Our job involved pulling out the plants by the roots and bagging them. The work had to be done manually because chemical

controls are not acceptable in aquatic environments where fish and other species could be affected. We worked under the supervision of the National Park warden who manages Llyn Tegid, which is Wales’ largest natural lake and a National Nature Reserve and we collected on average between 30 and 40 bags each day.

The second project involved surveying for otters (*lutra lutra*) along the Dwyrdd river in the Vale of Ffestiniog. Otter numbers declined sharply in the UK in 1950s due to loss of habitat and

pesticide pollution. The survey method involved identifying the *spraint* or droppings of the otter and looking for other evidence of the presence of otters such as footprints in soft mud on river banks. Sprainting is an important aspect of the animals’ behaviour. They do it in order to mark their territory and tend to choose prominent places such as under bridges, on large boulders and at the junctions of watercourses. Although neither of us found any otter spraint other members of our survey group did. Our supervisor had briefed us very thoroughly about where to look, how to distinguish it from the droppings of other mammals such as polecat or mink, and even brought with her samples in small plastic bags for us to smell and analyse! Samples collected are sent to a laboratory in Ireland where the DNA is analysed to *genetically fingerprint* the otters. This work has allowed scientists to establish not only the sex and diets of individual otters but more revealingly the extent of their territories.

We are very grateful to have had the opportunity to get involved in some practical conservation project work in the Snowdonia National Park and to reflect on how public attitudes and fashion can impact adversely on biodiversity and landscape. The impact of exotic species on biodiversity is of particular concern. Despite international controls and regulation there remains an ever present danger that alien species can be accidentally introduced bringing about radical changes to the character of traditional landscapes.

### OH and LN

#### Note

Image derived from web is attributed to [dibbinsdale.co.uk](http://dibbinsdale.co.uk) shows a stand of undisturbed Himalayan balsam.

## CHANGING LANDSCAPES: CHANGING POWER STRUCTURES

Workshop report from Marcus Leibenath

From September 25-27 some fifteen German-speaking landscape researchers gathered in Rottenburg, a small town in the lovely Neckar valley south of Stuttgart, for a workshop entitled 'Changing Landscapes – Changing Power Structures'. They are members of the 'Arbeitskreis Landschaftsforschung' ([www.landschaftsforschung.de](http://www.landschaftsforschung.de)) this in English translates to: 'Working Group for Landscape Research'. The group was set up in 2011 in close cooperation with LRG and currently has about 80 members in total — most of them academics and practitioners with an interest in the cultural, sociological and political aspects of landscape analysis, planning and management. The workshop took place

manifested in present day landscapes of southern California to a reflection on different concepts of power and how they might be applied in landscape research, including also landscape ideologies in the Nazi era and their repercussions in post-war Germany. Other presentations dealt with agrarian landscapes in the Ruhr Area and heterogeneous types of tourism landscapes in the French Alps together with an anthropological account of community selforganization, organic farming and sustainable landscapes in a small village north of Berlin. The group will continue its discussion on power and landscapes in a special session on 'Political Landscapes' at next year's PECSRL conference in Gothenburg and Mariestad.

The field trip led to a prominent chapel hill, the top of which offers a scenic view of the Neckar valley and up to the heights of the Swabian Jura. The river Neckar, which used, periodically, to flood the plain, is now dammed and yields electricity. Many southern slopes in the region are still used as



at Rottenburg's University of Applied Forest Sciences and was attended by two LRG board members (Peter Howard and the author). The programme included a series of presentations and related discussions, a field trip as well as a strategy debate about the group's future orientation.

The topics of the presentations ranged from an analysis of power structures

vineyards as they have been for centuries.

In the final strategy debate it was agreed to hold next year's workshop in Hamburg, to be organized by colleagues from Universität Hamburg and the Helmholtz-Zentrum Geesthacht. The group also agreed on 'Seascapes and River Landscapes' as a theme. As usual, presentations on

topics other than the conference theme are welcome. A more detailed call for papers will be published in early 2014. The field trip is set to highlight Wilhelmsburg, one of Hamburg's central districts which partly lies below sea level and which recently was the locus of an International Building Exhibition (IBA\_Hamburg).

ML

Photo caption:

*Chapel Hill ('Wurmlinger Kapelle') near Rottenburg with Swabian Jura in the background (photo: Thomas Henrich)*

## THE SLOW POST ROUTE

by Philip Pacey

In an article in *The Guardian* on 5<sup>th</sup> September, George Monbiot asks 'Who could possibly be boorish enough to oppose a campaign to turn the Lake District into a world heritage site?' Yes, you've guessed it; the answer is — George Monbiot. He goes on to argue that the fells have been 'sheepwrecked' [sic], the forests that once covered them having been reduced to 'bare rock and bowling green'. Wildlife is scarce. Worse, celebration and preservation of the Lake District have made it an 'expression of cultural hegemony'. **It doesn't so much invite as command our gaze and demand our veneration and awe.**

George Monbiot may be asking important and pertinent questions; I hardly know and cannot tell. You see, I am a willing victim, in thrall to the beauty of the Lakes, a veritable disciple of Wordsworth and Ruskin. In normal circumstances I'd follow George Monbiot anywhere, confident in his ability, more than almost anyone else's, to save the world, but so far as the Lake District is concerned I can only plead with him to, in Yeats' words, 'tread softly because you tread on my dreams'.

Yet it was not in the Lake District that I first fell in love with the Lake District. My first encounters with the Lakes were indirect, through total immersion in the 'Swallows and Amazons' series of children's books by Arthur Ransome which my father brought home from the library at Hitchin, in Hertfordshire. Several but not all of the books are set in a Lake District so accurately re-imagined by Ransome that generations of readers have sought out and identified locations which inspired scenes in the books. An Arthur Ransome Society flourishes. So it was that, as a nine or ten year old, I discovered the Lake District, experiencing it as an astonishingly complete landscape, the diversity of which made it all the better as an adventure playground, a place in which children, set free, could camp and explore, sail on lakes, follow the course of a stream into the fells, venture into mine workings, tickle trout, visit charcoal burners, watch birds, rescue a stranded sheep, discover a secret valley among the 'bare rock and bowling green', and in winter (in my favourite book of the series), re-discover the same landscape transformed by snow and ice, offering itself to all manner of winter sports and activities. Surely no other place in Britain could yield such variety of — not mere 'scenery' — but *real*, deep, abiding landscape, including lakes, pasture, wetland, rivers, islands, woodland, fells, screes, ridges, bleak plateau and stony ground. Where we lived I would have to cycle several miles to reach even moderate hills; the only lakes I recall were artificial, in parks and the gardens of a stately home.

I read the 'Swallows and Amazons' books at least once more — now at boarding school and only too glad of opportunities to escape into their familiar world. But, strangely as it now seems, I did not visit the Lakes until I was in my early 20s. On doing so, I felt no conflict between the scenes which I carried in my head (and which are still there, more or less undisturbed nearly 50 years later) and the landscape I found myself in. I acquired a copy of an excellent handbook (1) which included an essay by the poet, Norman Nicholson, 'Looking at the Lakes'. Those pages introduced me to the Lakes as a 'cultural landscape', and I learned how this place, comprising an entire landscape grammar and vocabulary, lent itself for use as a primer by tourists unsure of what they should be looking at. After all, rugged hills like

those of the Lake District had long been regarded as obstacles, their dangers sometimes exaggerated for dramatic effect. Now visitors were led from one viewpoint to another where they were encouraged to turn their backs on the view in order to see it reflected in a 'Claude Glass', by which means it could more easily appear fit for a picture, a glimpse of Arcadia, of Elysian fields, an Earthly Paradise.

I came away from that holiday with a sequence of poems of my own, '*Land for Looking*', in which I explored my desire to do more than admire approved 'picturesque' views. I wanted to look further and closer, to find small delights woven into the fabric of the landscape; to 'read' the landscape; and not least, like Ransome's children and so many tourists today, to engage with it physically, if only by walking; to respond to its invitations to play.

During that holiday which I enjoyed so much I also took special pleasure in my father's enjoyment. I think it must have been his first visit to the Lake District too; or if not, he had only discovered the Lakes relatively recently, through the generosity of friends who lived there. Staying at Grange in Borrowdale, we took the footpath past Castle Crag, above Rothwaite, to Seatoller and 'The Yew Tree', a path which I remember as passing through woodland and alongside a stream, climbing through rubble, emerging into a vast panorama of valley and fells, then proceeding on a terrace apparently cut into the fellside, carpeted with 'bowling green', best appreciated in bare feet. A stream tumbled percussively from somewhere above. Sheep were present in quantity but did not arouse our wrath. My father christened this walk 'The Slow Post Route', explaining that he would like nothing better than to be a postman if only he could walk this way every day, taking his time. This was his way of saying that for him this was Heaven on Earth, that he felt himself to be treading on hallowed ground.

**PP**

### Notes

- (1) *Lake District* (National Park Guide no.6). HMSO, 1969,
- (2) Philip Pacey. *Earth's Eye: selected poems of place*. Taxus Press, 1988.

## I INVITE EDITOR FAIRCLOUGH TO SPEAK ABOUT HIS JOURNAL 'LANDSCAPES'

Members of LRG's board of directors, he explains, have many other distractions in life, although admittedly these also often concern landscape. One of his (since 2011) is being joint-Editor (with long-time colleague Paul Stamper) of a twice-yearly journal called *Landscapes*. This was founded by Richard Pursloe in the late 1990s, and published for its first 13 volumes (two issues per volume) by his Windgather Press, latterly owned by Oxbow Books. Since this year, and volume 14, it is published by Maney for Oxbow (details, if needed from them).

In its early years, '*Landscapes*' was mainly concerned with landscape history and archaeology, and with designed landscape, principally in Great Britain, and principally of the medieval and 'post-medieval' periods. That historical leaning still exists, but the journal has changed, in parallel with the maturing of the concept of landscape in most fields, and its focus now extends to modern and contemporary history and to prehistory, to lands beyond the shores of Great Britain, and to the viewpoints and interests of many disciplines and arts other than those only of historians and archaeologists.

Subjects of recent articles have included the landscapes of communist East Germany, the politics of polder-construction in mid 20<sup>th</sup> century Italy and the Netherlands, Bronze Age depictions of landscape in north Italian rock carvings, and Viking perceptions of the prehistoric landscapes they inherited when they settled Orkney. We have published papers on Hadrian's Wall (as perceived landscape over the past 1500 years), and one on the construction of landscape in Rudyard Kipling's 'Pook's Hill' stories. There was a recent photo-essay on the never-still seismic landscape of southern Californian, another on the post WWI memorialisation of the Lake District by fell-walkers and climbers. We have given space to urban and post-industrial landscape in the Black Country (an English area east of Birmingham) and on urban and 'dissident' landscape in Brixton (London) and Dublin. A long-



running (if occasionally intermittent) series of articles is ‘What Landscape Means to Me’ where we give space for personal, autobiographical or philosophical ruminations to scholars or artists well known to our readership. Recent contributors to this series have been the cultural geographer Stephen Daniels, the archaeologist and artist Peter Fowler, and the historian James Bond. And, of course, we publish book reviews and longer review articles. All our published papers are peer-reviewed, of course.

Apart from the breadth of its content, the interdisciplinary (and increasingly the international) spread of our contributors, and its accessible writing style aimed at general interested readers as well as academics what for

many subscribers distinguishes *Landscapes* is its visual dimension. *Landscapes* articles must be illustrated — with preference for especially strong, arresting images, very often in colour. We hope that *Landscapes* — like landscape itself — appeals to the eye as well as to the intellect.

**GF**

### **LRG dissertation prize first project descriptions.**

See table of PhD awards (page 11). Other dissertation descriptions (Masters degree) will appear in LRE 68.

## **KEEPING TRACK OF NATURE:**

Interdisciplinary insights for PEM — participatory ecological monitoring.

by Sam(antha) Staddon

Participatory ecological monitoring (PEM) aims to bring together conservationists and members of the public to collect scientific data about changes in nature — in species, habitats, ecosystems and natural resources. Given that such monitoring not only concerns measures of nature but inherently the participants doing the measuring, it is as much to do with social processes as it is to do with ecological ones. By drawing on detailed ethnographic work from the community forests of Nepal, this thesis aims to explore some of the social dimensions of PEM and of its consequences for socio-ecological regimes. Current debates in political ecology, development studies and nature/society studies provide the theoretical basis for the investigation. The novelty of the thesis lies in its extensive empirical data, which allows it to explore the topic’s current understandings.

The thesis establishes the following tentative theoretical findings. It firstly draws attention to the importance of the informal, often unconscious ways in which we all observe changes in nature and of the need to recognise such ‘local monitoring’ in relation to participatory monitoring. It draws attention to the situated nature of practices of monitoring and the heterogeneity of people involved, suggesting that this has consequences for how costs and benefits arising from PEM are distributed amongst participants and beyond. It argues that without attending to such consequences, PEM may serve to (re) produce social inequalities which are the basis for marginalisation and that it may become embroiled in local power struggles.

The thesis argues that whilst participatory monitoring may provide useful data on changes in nature, that this information will not automatically influence decision making over nature conservation or the use of natural resources. A multitude of other factors



are important in such decision making and the ways in which these relate to and potentially constrain the effectiveness of PEM are discussed.

The thesis finally offers a typology with which to better understand the complexity amongst PEM projects – based on who and what they are for – and with which to approach the conflicts and inconsistencies they present. The thesis concludes that without a careful consideration of their inherent social dimensions, participatory monitoring projects will ultimately fail in attempts to both improve the condition of nature and the lives of societies that depend on it, for the two are intimately connected. Interdisciplinary studies such as this are therefore seen to offer great potential to participatory and community-based approaches to conservation and natural resource management more widely.

**SS**

## SURPRISE LANDSCAPES

by Ros Codling

Recently I read Robert Macfarlane's *The Old Ways*. He recounts sailing in an open boat from the north of Lewis to Orkney:

*The water gurgled and slapped, as if it had thickened. I thought of Pytheas, the Greek voyager who had sailed north from France in 325 BC, following established trade routes to begin with — the 'tin road', the 'amber road' — and then just kept going, pausing on Lewis to erect his gnomon and take readings of sun height and day length, before sailing still further north, until he reached a latitude where the sea turned gelid with the cold and the air palled with freezing mists, such that the atmosphere resembled what Pytheas enigmatically called a sea lung (pneumon thalassios).*

Macfarlane, Robert. 2012. *The Old Ways*. London, Hamish Hamilton. Page 133.

Pytheas experienced the gradual

beginning of the freezing of the sea — the almost oily appearance of the surface which is followed by the build-up of crystals in a myriad of forms that ultimately coalesce to form a solid surface. A more recent Arctic visitor wrote:

*"I keep referring to the place as a 'landscape' - the landscape in which I work. ... When I was riding over the ice I thought, this isn't land, this is water, so is it a waterscape? But it is as solid as the earth, for the moment. The more I work with the snow and ice, the more I realise there is so much to learn ... everything is fluid, even the land, it just flows at a very slow rate."*

Goldsworthy, A. 1994. *Stone* published by Harmondsworth, Penguin Viking. Page 64.

About two and a half thousand years earlier the phenomenon was also described:

*From whose womb comes the ice?  
Who gives birth to the frosts from the heavens?  
when the waters become hard as stone,  
when the surface of the deep is frozen?*  
Job 38 verses 29-30 New International Version of the Bible.



I am content with the suggestion that Job was anonymously written sometime during the period 600-400BC. Its vocabulary has made translation extremely complex, even leading Luther to complain about the difficulties he faced attempting to enable the patriarch Job to speak idiomatic German.

What excites me though is the thought that people in the often hot and dry, sometimes barren, Middle East were presented with the description of sea ice — a component of a landscape unknown to them. It is seemingly stable but always moving, apparently solid but ultimately liquid. These mysteries, seen in distant polar areas, may have been described to a few but through the

writings of an unknown author were presented to many.

How could the writer have known about such phenomena? The general thought is that trading expeditions went to Northern Europe for commodities such as tin, flint and amber. Goods were bought south, either by sea-going ships or overland and by rivers, following the "Amber Road" that linked the Baltic to the Mediterranean.

So, two and a half thousand years ago, the people in the Middle East were introduced to an unknown northern landscape. As one living in the 21st century with access to the internet and almost unlimited opportunities to travel, I doubt if I can ever experience totally "unknown landscapes" but there can be "surprise landscapes". I assumed the Arabia Peninsula to be a hot, sandy and mountainous desert but a television programme about Dhofar in Oman showed tropical deciduous forests, enabled to grow because rain laden monsoon winds hit an escarpment. A calendar showed two or three of the wandering stones in Death Valley in North America: these sailing stones exert an almost mystical fascination — mystical in the sense of transcending my understanding and leaving me with a sense of questioning wonder. Nearer to home and over forty years ago I saw the hollies on Holmstone Beach, Dungeness, but I remember my immediate thrill and the thought that I was seeing a Japanese Zen garden writ large. All were surprise landscapes.

I enjoy finding links that span both time and space. Pytheas was remembered by Macfarlane and reading that passage reminded me of Job, so within a few seconds two and a half thousand years and three thousand miles were mentally traversed, prompting images of the seas around the Scottish Isles, sea ice and the arid Middle East. Long may landscape continue to surprise and generate such free and joyful thoughts.

**RC**

**Note**

*In writing this Ros Codling has the benefit of having visited the Fuchs Ice Piedmont a coastal strip of low lying land on Adelaide Island perhaps a key to her interest in frozen seascapes. See LRE 44 pp1-3 a back number available on our website.*

## WINDFARM RELATED DISTURBANCE ON STREAMWATER

A case study of the Whitelee  
Catchments, Glasgow  
by Helen Murray.

This research examined the impact which onshore windfarms sited on peatland have on streamwater carbon (C), phosphorus (P) and nitrogen (N) dynamics. Disturbance to peatland arises through the excavation of borrow pits, construction of roads, insertion of turbine bases and associated deforestation during windfarm development potentially increasing the transfer of C, P and N from peatland to rivers. To identify which impacts occur, streamwater samples from nine catchments draining the Whitelee windfarm, Scotland, Europe's largest onshore windfarm (see end note), were collected approximately bi-monthly during and after windfarm construction. This built on existing pre-disturbance data. The samples were analysed for dissolved organic carbon (DOC), particulate organic carbon (POC), total organic carbon (TOC), soluble reactive phosphorus (SRP), total phosphorus (TP) and nitrate (NO<sub>3</sub>). Time series were constructed and annual exports were calculated so that inter-catchment and annual differences could be detected.

DOC exhibited seasonality with maximum concentrations and exports towards the end of each summer. When the seasonality of the catchment response was compared, the TOC time series indicated a slight increase during the maximum phase of the seasonal cycle in one catchment only, coincident with windfarm-related disturbance.

In two catchments where clear-felling and extensive brash mulching were carried out, as much as a tenfold increase was observed in P concentration, coincident with the timings of windfarm-related forestry operations. The water quality status of these two catchments declined from 'good' to 'moderate' and had still not shown a full recovery two years later.

To determine the most likely controls

of C, P and N, a GIS analysis was employed to describe the physiography of each catchment and to quantify the extent of windfarm-related disturbance. I used multiple linear regression analysis using median concentration and export for a low-disturbance phase and a maximum-disturbance phase, with the catchment characteristics from the GIS analysis to identify potential impacts.

The percentage of the catchment which was a peatland, was observed to influence streamwater C; the proportion of catchment in pasture was observed to influence streamwater N. Windfarm-related disturbances were also found to control streamwater dynamics. The extent of deforestation greatly increased streamwater P concentration and there was a smaller increase in C, with consequent impacts on SRP and POC export. The source of this additional C and P resulted most likely from forestry operations, namely, clear-felling large areas of catchment and extensive brash mulching associated with the windfarm habitat restoration all of which offered new organic material available for decomposition and the potential for erosion of the newly exposed soil surface. Residual fertiliser used to establish the conifer trees, the reduced vegetation uptake of soil P and P release from the roots of the felled trees are three further sources of P in streamwater. The distance to the nearest disturbance was also found to influence streamwater dynamics.

Increasing road length was correlated with decreasing POC and P concentration causing subsequent decreases in export. This is likely to relate to the effective use of settlement ponds, flocculation blocks and ditch blocking which are created to reduce the amount of particulate matter reaching the stream network. It may also relate to the adsorption of P by the road construction material.

### HM

### Notes

Whitelee Wind Farm is the largest wind farm in Europe with 215 Siemens wind turbines and a total capacity of 539 megawatts. Whitelee was developed and is operated by Scottish Power Renewables, which is part of the Spanish company Iberdrola.

Billed now as a recreation area only 20 minutes from Central Glasgow the windfarm covers an area of nearly 12,000 square kilometers or roughly the area of Aberdeen.

## THE ROLES OF AESTHETIC VALUE IN ECOLOGICAL RESTORATION

by Jonathan Prior:

Ecological restoration has been identified as an increasingly important tool in environmental policy circles, from reversing species loss to mitigating climate change. While there has been a steady rise in the number of research projects that have investigated different social and ecological values that underpin ecological restoration, scholarship has predominantly been carried out at the theoretical level, to the detriment of engaging with real-world ecological restoration projects. This has resulted in generalised and speculative accounts of ecological restoration values.

My thesis seeks to address this research gap through a critical analysis of the roles that aesthetic values play in the creation and implementation of ecological restoration policy, using three different cases of restoration at the landscape level: **Carrifran Wildwood** in southern Scotland; the **River Skerne** in Darlington, north England; and **Parc Penallta** in south Wales. As a means to understand the multi-sensorial qualities of ecological restoration better – both in terms of policy intentions and actual outputs, I employ interdisciplinary research methods, including semi-structured interviews, interpretive policy analyses, still photography, and sound recording.

Throughout the thesis, I trace the various roles of aesthetic values, starting from the initial development of restoration policy through to the management of the post-restoration landscape. Along the way, I consider how

aesthetic values are negotiated in relation to other types of social and ecological values, how aesthetic values are measured, articulated, and projected onto the landscape by restoration policy makers, the ways in which aesthetic values are applied through design and management strategies across each site, and also the resulting aesthetic qualities and characters — whether intentional or unintentional — that emerge from the actions of human and non-human restoration actors.

Throughout the thesis, I engage with a number of current research themes within the ecological restoration literature that intersect with aesthetic value, such as the use of ‘native’ and ‘non-native’ species in landscape restoration, and the selection procedure of landscape reference models that act as blueprints for restoration. I also address hitherto unasked spatial questions of ecological restoration, including an examination of the aesthetic relationships between a restoration site and adjacent landscapes, and the application of spatial practices to regulate certain forms of post-restoration landscape utility. Through a close analysis of each policy pathway, I demonstrate that aesthetic values play a multitude of roles within these three restoration projects, and ultimately show that as aesthetic values are put to the realization of different policy objectives, they are inherently bound up with competing ethical visions of desired future society-nature relationships.

**JP**

#### Note

A full version of the thesis can be viewed online or downloaded as a PDF document here: <http://bit.ly/19Sn4oF>

**The table at the head of this page lists the PH.D winners of LRD dissertation awards.**

Jonathan Prior	<i>University of Edinburgh 14 Carlyle Place EDINBURGH EH7 5SR <a href="mailto:jonprior@hotmail.com">jonprior@hotmail.com</a></i>	PhD: Language, Text, Humanities - Cultural Geography
Samantha Staddon	<i>University of Edinburgh School of GeoSciences [Teaching Fellow in Environment and Development Geography and the Lived Environment], Drummond Library, EDINBURGH, EH8 9XP <a href="mailto:sam.staddon@ed.ac.uk">sam.staddon@ed.ac.uk</a></i>	PhD: Practical Science and Planning - Material Geography
Helen Susan Murray	<i><a href="mailto:hellymcbelly@hotmail.co.uk">hellymcbelly@hotmail.co.uk</a> University of Glasgow School of Geographical and Earth Sciences</i>	PhD: Practical Science and Planning - Environmental Management



## ESSEX CORN COUNTRY

by Bud Young

The north Essex landscape has me in its embrace and not because it is my wife's landscape. I love it even though I am embedded (interned for life perhaps) in the wooded, rocky and steep fringes of Dartmoor. I am talking about the areas of cornland which involve the rivers Blackwater, Pant, Stour, and Chelmer and all the small towns and villages which this

quietly undulating but slightly flat landscape includes. It is perhaps because it is arable that I find it so appealing. Perhaps also because I have twice visited it at harvesting time and can hardly credit the amount of grain (above, centre), horsebeans and oil seeds (following page) that are being harvested here. It exudes a feeling of bounty and arable continuity. The villages collude in this: expanded sometimes, but mostly amazingly coherent, good looking, with thatch, red tiles, decorative plaster parquetry white painted half timbered fronts and broad highstreets. Corn fed prosperity.



Oil seed rape

out “we are farm fields and we produce, we dominate your route and we are the route, we are the landscape and we are the land, we are its history and the reason for its being. Understand this!”.... A slight descent to the Chelmer or the Pant, the clapboarded mill and withies, a narrow wetland strip.

I add here a photo mosaic of the area (thanks to Google maps) and I note (using a thick red line) that there is a major difference between land around Wethersfield (circled in red) where I stayed and land to the southwest around Great Bardfield. Will my new chums in the Mediaeval Settlements Research Group — the MSRSG offer me the explanation? Or should I go directly to the Soil Map of England and Wales? Physical or cultural? Or are the two inseparable?



And as a footnote to this scene of ‘Batsford cornlands’ check out the one time USAF base at Wethersfield, which has morphed over the years into an MOD global security establishment. People in the village—town recall the American cultural influences. Extra houses were built. Children begat.

**Notes**

**The Soil Survey of England and Wales** at 1:250,000 scale. Sheet 6, 1983 A seminal document for anyone studying landscape differences.

C Henry Warren **Corn Country** Publisher 1940 Batsford Books. Another of those nostalgic, evocative, dated but accurate if rose- tinted portrayals of the English countryside in the 1930s and 40s.

Leave the Stanstead–Harwich A120 (so smooth, useful and quiet but ... ) at Great Dunmow and go north To Wethersfield. Where I travel there are few main roads and the minor ones wind in a series of doglegs between fields. It is the fields that impose the doglegs; fields often without hedges; fields of most irregular shape. And the fields press in as it were ‘straight though the car window’. They shout



Landscape Research Extra is published by Landscape Research Group Ltd. Landscape Research Group Ltd is a Registered Charity (No. 287610) and Company Limited by Guarantee (No. 1714386, Cardiff). Its Registered Office is at: 89A The Broadway, Wimbledon, London SW19 1QE  
 For disclaimer and addresses for editorial enquiries and administrative correspondence see the box on page 4.  
[www.landscaperesearch.org](http://www.landscaperesearch.org)