

Entrevista

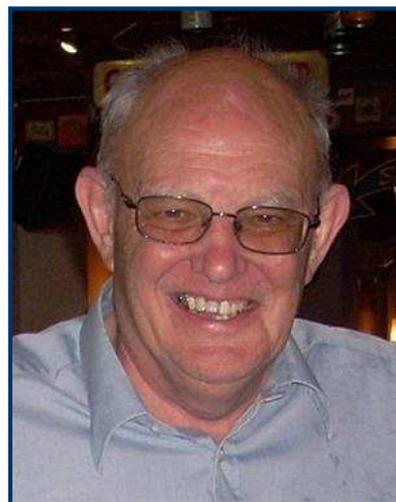
Bob Bunce

Estonian University of Life Sciences, Tartu. Estonia

“All seems well with landscape ecology in Portugal”

Entrevistado por APEP (Associação Portuguesa de Ecologia da Paisagem) Outubro de 2012

R.G.H. Bunce (Bob Bunce) é um destacado investigador nas áreas da ecologia da vegetação e ecologia da paisagem, com mais de 40 anos de experiência. É particularmente reconhecido o seu trabalho no âmbito da classificação de ecossistemas e de elementos da paisagem e no desenvolvimento de metodologias padronizadas de avaliação e monitorização. Apesar de baseado no Centre for Ecology & Hydrology (Reino Unido) e, mais recente, no centro Alterra WUR (Holanda), o trabalho de Bob Bunce forneceu um contributo determinante para o estabelecimento de protocolos de monitorização e conservação da biodiversidade no continente Europeu e mesmo noutros continentes e biomas. Bob Bunce ocupou lugares diversos em organismos internacionais, destacando-se o envolvimento na Associação Internacional de Ecologia da Paisagem (IALE) onde serviu como Presidente entre 2003 e 2007. Foi anteriormente presidente do IALE-UK tendo ainda contribuído para a criação das associações nacionais de ecologia da paisagem na Suécia e na Áustria. Bob Bunce tem sido um apoiante incondicional da APEP, Associação Portuguesa de Ecologia da Paisagem, mesmo antes da sua fundação, em 1999, e tem participado com grande frequência em eventos nacionais e internacionais promovidos pela APEP desde o Encontro Nacional de 2000 realizado em Bragança. Colabora também com grupos de investigação em ecologia da paisagem e monitorização dos ecossistemas em Portugal, no âmbito de projetos nacionais e europeus. Em 2011 foi distinguido pela APEP como o primeiro Membro Honorário da Associação.



APEP: How long have you known Portugal, and what brought you here for the first time?

My first visit was very brief in 1993 and only involved crossing the border with Spain and Portugal, south of Pontevedra. I was impressed by the small-scale landscapes and traditional agriculture. I remember buying some Vinho Verde from a tiny roadside shop. Only the best was labeled - with a felt tipped pen! They also sold local maize bread, which resembled a wheel of lumpy, yellow concrete. I decided that my teeth were not up to chewing it. My next visit was in about 1997 when I attended a meeting in Lisbon to discuss the development of a European ecological map, integrating the Potential Natural Vegetation Map of Europe and an environmental classification. Although this was never published, it was used in several European projects such as MIRABEL. This visit gave me my first real introduction to Portugal. I then drove to Coimbra and eventually to Spain. My abiding memory of the border with Spain was of virtually abandoned, granitic uplands invaded by species of *Cytisus*.

In about 2002 I attended a joint meeting between APEP (the Portuguese Association for Landscape Ecology) and the Spanish chapter of the International Association for Landscape Ecology (IALE) in Bragança, in north-east Portugal, where I was impressed with the range and quality of work being carried out in the country. There was also a visit to the Duero valley, although there was not enough time to appreciate fully the landscapes present. After this meeting, a joint conference between APEP and IALE (UK) was held, on the Ecology and Management of the Atlantic Mountains in Guarda; the proceedings of which were subsequently published. During that meeting, we began to plan for the European IALE congress on Mediterranean Landscapes, which was held in 2005 in Faro, southern Portugal. In the preparations for the meeting, I visited Evora for the first time and very much enjoyed the city and the surrounding countryside. The committee of APEP worked hard for this meeting and it was good to meet Teresa Pinto-Correia and Isabel Ramos in their own country. They also participated in the BioHab European project on habitat recognition. The

meeting was successful, with good sessions and excursions to the small scale landscapes near Faro, and to the open, large fields of the southern part of Alentejo. Again, the proceedings were published to provide a record of the meeting.

Although I visited Portugal several times for work and holiday in the interim period, the next major project was the European Biodiversity Network (EBONE). Joao Honrado from Porto led the Portuguese team and we had several meetings there between 2008 and 2011, to develop the methodology in complex, small-scale landscapes; including the western section of the Duero valley. We had some excellent discussions on the level of detail required, and the conclusions were built into the Manual for Surveillance and Monitoring published by Alterra in 2011. The methodology was also used as a basis for a project on monitoring biodiversity and landscapes in northern Portugal. It is hoped eventually to extend this project to the whole of Portugal. In 2011, we also organized a meeting in Ponte de Lima, in conjunction with APEP, on monitoring small-scale landscapes in Atlantic Europe.

Which are your preferred landscapes in Portugal?

I have travelled extensively throughout Iberian Portugal, but I always think it is invidious to say which landscapes I prefer. Rather, I appreciate the landscapes that I am in at any given moment. Each region has its own character and furthermore Portugal - more than most countries - has a close relationship between local products and the landscapes in which they are produced. Each region has its own character and distinctive food and wine. Thus in the Algarve there are the contrasts between the small vineyards, citrus plantations and olive groves, the coastal cliffs and coves and the abandoned fields and *Eucalyptus* forests. Whilst Faro is a fine city, there is much uncontrolled development both on the coast and in the countryside. The south of the Alentejo region has some of the most open landscapes in Europe, comparable to the steppes of Russia, and has the largest single population of the Great Bustard in the continent. I spent a whole day trying to see the bird but only enjoyed the massed expanses of colorful annual plants. However, I did see a Pallid Harrier; a bird usually found in Eastern Europe; drifting across the landscape. Further north in the Alentejo are extensive stands of *montado*, the distinctive Portuguese

agro-forestry system, with Cork Oak and grazing animals as well as crops. Teresa Pinto-Correia's team has carried out many studies of the ecology of this habitat and its links with socio-economic factors. This system; together with the comparable *dehesas* in Spain; not only has some of the highest levels of biodiversity in Europe but are also a distinctive landscape in their own right. The coastal areas are also distinctive, having salt marshes with Flamingos and other wading birds. The coastal plain is extensively urbanised. The next region further north is Coimbra and central Portugal. Inland there are rugged granitic uplands culminating in the impressive Serra da Estrela, which has the finest mountain habitats in Portugal. The most northerly region is Porto and its coastal plain has many small-scale landscapes, many of which can be considered to be poly-cultural, because they have many traditional practices in close proximity. Such landscapes are also found inland, especially in the lower section of the Duero; which is justifiably one of the most famous in Europe, with the distinctive steep, terraces of port wine vineyards.

How can one choose between these? It is impossible, so just appreciate where you are at a given moment of time.

What changes have you see during your visits? (Landscape is included in this section since it is difficult to separate.)

This is always a difficult question because many changes are gradual and it is difficult to say with certainty. All I will therefore do is to list some of the most obvious:

1. Urbanisation. This seems to have three general types. Firstly, the obvious expansion of cities and their associated infrastructure has been extensive and probably it is still continuing. Included in this category is the urban sprawl along the coastline, which may have slowed down in the recession but has had a major impact on visual and ecological resources. The second type, especially in the Algarve, is where second homes have been built in the countryside, especially in forests, mainly for foreign owners. The landscape ecological impact of these is unknown but seems certain to cause fragmentation of animal and plant populations. The third type is the dispersed development of residential houses, often around

the margins of villages and small towns. Many of these developments do not seem to be controlled, and have a major cumulative impact.

2. Intensification of agriculture is taking place in many areas, varying from dairy to herbicide application in maize fields. This process reduces biodiversity and homogenizes the landscape.
3. In contrast there is widespread abandonment of agriculture in a range of situations. In the south, it is due to the population moving from agriculture into tourism. Poorer land in many places throughout the country, varying from the granitic uplands to the south of the Alentejo, is going out of agriculture, with subsequent invasion by scrub. Because of the introduction of artificial stoppers and metal wine bottle caps; combined with its labour intensiveness; cork production in the *montados* is also under threat. However, Teresa Pinto-Correia emphasizes that this is a change of use rather than abandonment.
4. There is a major expansion of alternative energy sites, especially windmills. These have mainly a visual impact but they also fragment heathlands and have some impact on migrating birds, although this is often over emphasized. New dams are less common, but they do have major impacts, especially on habitats in valley bottoms.
5. Portugal has one of the highest densities of motorways in Europe, which adds to the urban impact, and is especially important in the fragmentation of habitats.

What is the state of landscape ecology in Portugal and how does it compare with the situation elsewhere in Europe?

All seems well with landscape ecology in Portugal. I regularly meet colleagues at scientific and project meetings. PhD students are active and are doing good work, especially on the modeling aspects of the science. There are new initiatives for monitoring biodiversity at the landscape level, integrated with remote sensing. Portugal has always been strong on the links between change in land cover and socio-economic factors and this work is continuing. Traditionally, APEP has been one of the most active chapters in Europe

and it maintains its position as a strong group of committed landscape ecologists. In addition, Teresa Pinto-Correia and Isabel Ramos are both involved in the recently formed IALE Europe. The enthusiasm of the young scientists is also encouraging for the future and, hopefully, there will be a strong representation at next year's European meeting in Manchester.

What are the major landscape-related challenges in Portugal?

Portugal is a small country that is densely populated and therefore fragmentation of habitats is a major issue. The challenge is to produce definitive work to demonstrate the problems and the measures that can be taken to ameliorate the situation. Linked to this is the necessity for regional and national figures of changes in the stock, and change of landscape features and biodiversity. Such figures would emphasize the declines that have taken place over the last few decades and could form the basis for new policies. In this respect Portugal is in a similar situation to most European countries, but it has the advantage that in recent years it has built up the expertise to solve the problems. Once data become available then the modelers can exploit them to show the implications of the trends that are taking place. Another challenge is to study the landscape ecology of urban areas, which has hardly begun in the Mediterranean region. Portugal is also in the front line for potential impacts of climate change, because it has a Lusitanian climate in the north and Mediterranean climates further south. One of the most likely scenarios is the northward shift of the latter climates, which would have a major impact in such a small country. In addition, the habitats of the mountains would be at risk because of the lack of high altitudes.

How do I see the role of landscape ecology and landscape ecologists in Portuguese society?

In this respect, Portugal has the same problem as other European countries - that of getting their results into the planning process. Only determination and commitment will result in success, and it may be necessary to spend more time in talking and interacting with policy makers to advance the process. One thing is certain; Portugal has enough sound landscape ecology to be useful to planners in developing suitable policies. In this respect, collaboration with landscape

architects could be useful; as elsewhere in Europe, it has been shown that frequently minor changes in design can bring major benefits in landscape and biodiversity terms. IALE (UK) and APEP have a history of collaboration and hopefully this will continue. Discussions at the Manchester

IALE meeting would be a useful starting point. Portugal could benefit from the experience of other countries in influencing planning and then possibly set up a forum for meetings between planners and landscape ecologists in Portugal.