

Dykes, Nigel, Prince, Heather, Lemmey, Richard and Bunce, R.P. (2007) The Picos de Europa mountains, north-west Spain, an inspiration to non-specialist students to study living cultural landscapes. In: 7th International Association of Landscape Ecologists (IALE) World Congress, 8-12 July 2007, Wageningen, The Netherlands. (Unpublished)

Downloaded from: <http://insight.cumbria.ac.uk/id/eprint/625/>

Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

provided that

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
- a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

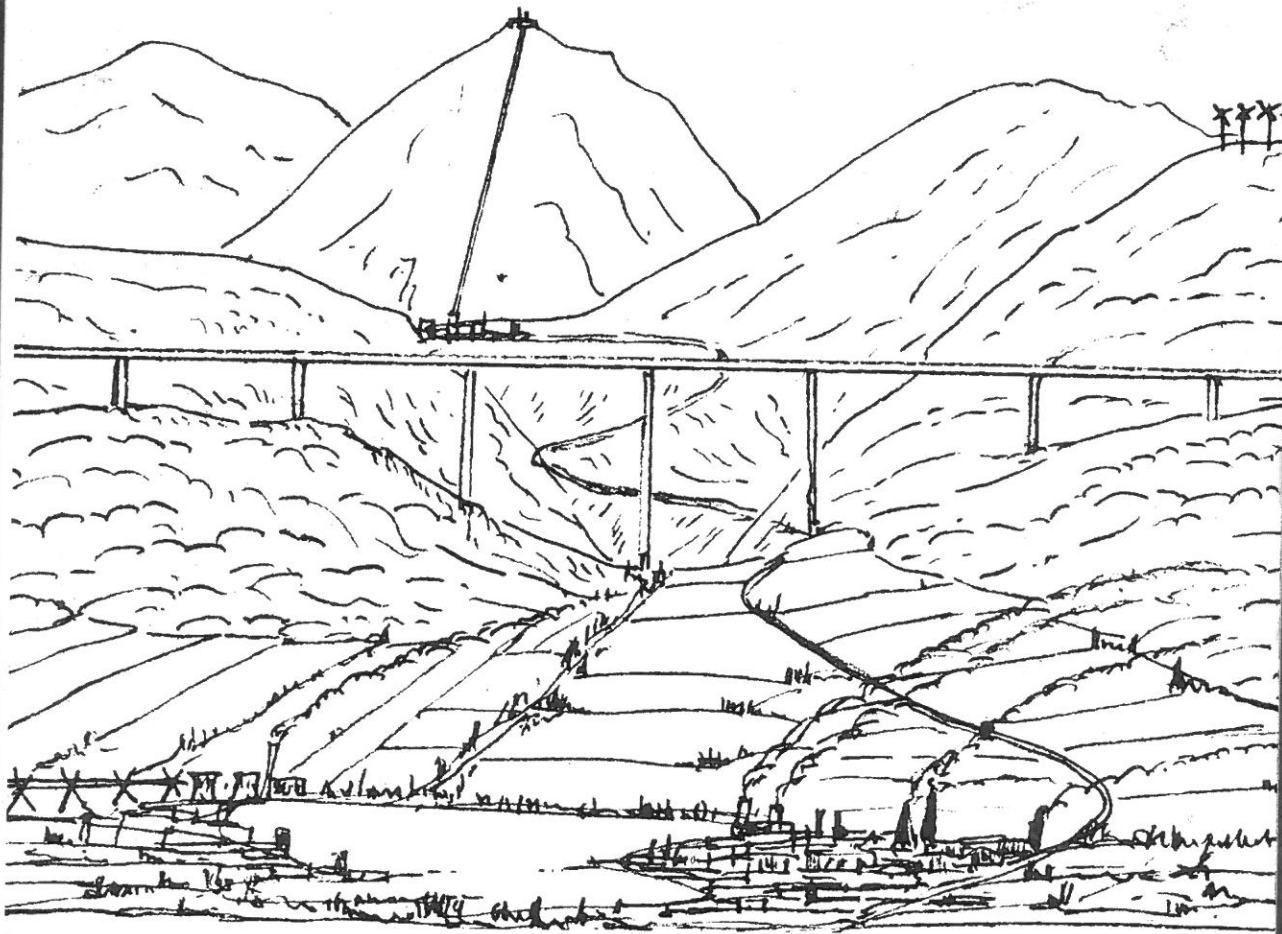
The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing insight@cumbria.ac.uk.

25 years
IALE 2007 World Congress July 8th -12th

25 Years of Landscape Ecology: Scientific Principles in Practice

Proceedings of the 7th IALE World Congress - Part 2



Editors: R.G.H. Bunce, R.H.G. Jongman, L. Hojas & S. Weel

Wageningen, The Netherlands
July 2007

The Picos de Europa Mountains, north-west Spain, an inspiration to non-specialist students to study living cultural landscapes

N.T. Dykes¹, H.E. Prince¹, R.P. Lemmey¹, R.G.H. Bunce²

¹ St Martins College, Ambleside.LA22 9BB
e-mail : n.dykes@ucsm.ac.uk

² Alterra, PO Box 47, 6700AA Wageningen, The Netherlands.

Since 1990 Outdoor Studies students from St. Martin's College (formerly Charlotte Mason) have surveyed components of the landscape in the Picos de Europa, north-west Spain. The three main aims of the course are: to introduce students to cultural landscapes; to encourage students to engage with disciplined recording of the landscape and to contribute to the knowledge of the area with the ambition that the results would be applicable to local issues.

The group study uses an environmental stratification for teaching the benefits of objective sampling. Field data on landscape features e.g., meadows, woodland and linear features are recorded from samples and converted into population estimates. These projects were often incorporated into a multi-day expedition through the mountains. The students are non-specialists and although at the sample level data is at times, inconsistent, overall it has proved useful to show trends at the regional level. Strong correlations between environmental and field data have been shown, e.g. using the European Survey method described by Bunce et al, 2005. The experience shows that such students can collect meaningful data and learn much from the experience.

In addition, students complete a personal project on one aspect of the mountain environment. These projects are diverse in nature e.g.; using indicator species to monitor meadow management with respect to isolation and classifying building types to monitor cultural change. The last sixteen years have built a formidable bank of information collated in a working document (Toledano, 2003). These projects have been supervised by specialist staff and have been effective in motivating students to learn about their own interests within these mountain landscapes.

These courses have been a peak experience for hundreds of undergraduates from St. Martin's college (Prince, 2005). The students have been inspired by this living cultural landscape and have completed many excellent landscape ecological projects. The educational benefits reach to a wider audience and contribute to the understanding of such landscapes, which is essential for their long term sustainability. Several papers have been published to inform a wider audience, e.g. Bunce *et al*, 1998. A limitation has been the lack of time for documentation of most of the student studies. The development and trials of various methodologies in the group projects have helped inform the design and testing of the European handbook (Bunce *et al*, 2005). Overall, although there have been benefits for the scientific community, the students have not only learned scientific principles but also appreciate and experience living cultural landscapes not found in the UK..

References

- Toledano, A. (2003) Abstracts of personal projects from the Picos de Europa, unpublished living document.
- Bunce, R.G.H., Bell, M & Farino, T. (1998) 'The Environmentally Sensitive Area legislation in the United Kingdom and its potential application to the Picos de Europa Mountains in North-West Spain. *Environmental Conservation*. 23 219-227
- Bunce, R.G.H. Groom, G. Jongman, R.H.G. & Padoa-Schioppa, E. (2005) Surveillance and Monitoring of European Habitats. Alterra Rapport.
- Prince, H. (2005) Graduate pathways: a longitudinal study of Graduates in Outdoor studies in the U.K. *Journal of Adventure Education and Outdoor Learning*. 5 (1) 21-3.