

## **EXECUTIVE SUMMARY**

### **Having an impact – the economic and environmental effects of countryside sports shooting**

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#### **Rationale & remit for this review**

The intention of the study was to assess and evaluate the findings of the PACEC 2006 & 2014 reports and to consider the methodological approaches employed. Essentially, we were tasked with ascertaining whether the reports and their findings were ‘*fit for purpose*’. The report was commissioned by *The League Against Cruel Sports* and was based on a review of the two PACEC reports on the economics of sports shooting (PACEC 2006, 2014). The work did not involve any primary data collection, as this was not part of the remit. The authors make no comment or judgement on the ethics of sports shooting or associated activities. The research focusses, from an impartial, academic perspective, on methodological and interpretational issues relating to the PACEC studies. The approach was to undertake a content analysis, and to examine the methods used and the conclusions drawn. The work was undertaken in the context of previous studies by our research team.

The work involved a staged approach through a series of logical steps:

1. Broad scene setting of issues, approaches and research agendas
2. Review and content / methods analysis of the PACEC report
3. Stakeholder analysis & liaison with clients
4. Focused, ‘expert panel’ assessments & methodology evaluation
5. Review of current literature on issues, impacts and on methodological approaches – this was done specifically for the literature available at or about the time of the first PACEC report and updated for the second.
6. Summary report on findings
7. The published report consists of the following: 1) Executive Summary, 2) Main Report
8. The research reports were supported by the following unpublished outputs: 1) Technical Appendix 1: Contingent Valuation bias problems in the 2006 report, 2) Technical Appendix 2: An Introduction to Economic Impact Analysis in Relation to Sports, Leisure, Tourism, and Conservation in the Countryside, 3) Technical Appendix 3: Sizing the Economic Value of the Countryside Recreation and Sport

Industry: developing an effective approach, 4) Technical Appendix 4: Expert Stakeholder Review, 5) Technical Appendix 5: Initial Review Of The PACEC 2006 Report.

The initial study focused on the 2006 PACEC report and then the same approach was applied to that for 2014. The methodologies and findings of the two reports (2006 & 2014) were then compared.

**Specific questions were asked:**

- a) Are the PACEC reports definitive statements?
- b) Are the PACEC reports' claims of economic and conservation benefit reasonable?
- c) Are the reports fair and balanced?
- d) Are the methodologies applied, transparent and reasonable?
- e) Are the interpretations made, reasonable and balanced?
- f) Are there any major omissions, weaknesses, or misinterpretations?
- g) Is the PACEC report placed in a context of the wider literature?
- h) Are there issues of grant aid and tax break issues / tax minimisation & the net effect on the public purse of tax and subsidy?
- i) Do the reports consider displacement of other initiatives and activities and deadweight issues?
- j) Do the reports consider displacement or other impacts specifically on competing leisure, sport and tourism activities?
- k) 'Horizon gazing' - What are the future trends likely to be and what might be the future research and development issues?

**Overview**

There is little doubt that sports' shooting has impacts on the British economy, and especially on that of rural areas. However, the big question is how much. Furthermore, there are matters of where, when and how these impacts come about and whether indeed, they displace other economic activities. As so often is the case with what seems like a simple set of questions, the reality is far more complicated. What is more, almost all sectors when they claim economic benefits are playing a political game and tend to over-egg the cake, more being claimed than can reasonably be justified.

Public and Corporate Economic Consultants (PACEC), conduct economic development and regeneration strategies, appraisal and feasibility studies, implementation, and the evaluation of policies and initiatives. This is to identify the benefits and any improvements required, and

develop creative solutions to economic and regeneration challenges in order to meet client requirements. All this is important stuff, and they produced a major report in 2006 on *'The Economic and Environmental Impact of Sporting Shooting'*, followed by another in 2014, *'The Value of Shooting - The economic, environmental, and social benefits of shooting sports in the UK'*. Both were independent reports produced for *'UK shooting and countryside organisations'*. Indeed, these important studies provide a welcome contribution to the literature, but they are in essence, advocacy statements. The reports have strong messages for those receptive to them, but the Devil is in the detail. A huge amount of information is presented and simply compiling the datasets is a task that PACEC should be congratulated on. Nevertheless, the sheer volume of information masks a lack of robustness in some findings and of transparency in methodologies. Moreover, much of the information is not testable, robust data, but opinion submitted by a sample with a stake in the outcomes. We gave the 2006 report to around 25 experts, some being strong advocates of sports shooting, and many felt overwhelmed by the sheer volume of information, that they were unable to comment on its validity.

Mostly, the PACEC survey information lacks independent verification. The concern this raises is demonstrated by an on-line survey link, which stated the following.

*'The full section will ask you for detailed information on shooting activities and expenditure, and might take up to an hour, but it is so important that such commitment is a small price for each of us to pay if it can really help safeguard the future of shooting. **If you do not know an exact answer to a question, please estimate it** - approximate figures are still extremely useful to us and far more helpful than no information at all.'* This same page went on to advocate *'I'm also going to add another piece of unsolicited advice: include as much as you can think of when you're totalling up how much you spent on shooting. We know politicians are mostly "troughers" who love to take our money - if they see how much we are spending on shooting (and therefore how much they are stealing in tax when we spend it) they might hold off closing us down for a while longer yet. I had to go back and change a lot of the numbers I entered at first'*. This does not undermine the entire report but it gives a realistic context to the quality and bias of some of the information. Bias is frequently an issue with stakeholder-sponsored studies and is largely unavoidable with work of this nature. However, it does mean that the implications of such advocacy bias must be taken into account when considering any findings.

We have an ongoing review of the PACEC studies, and for example, their 2006 figure of £1.6 billion for the value of the UK sports shooting contribution to the economy is clearly too big. (The 2014 PACEC estimate is £2 billion). The measure of contribution to the economy that government statisticians prefer is Gross Value Added (GVA), which only counts the value added by the industry itself, and not the value of inputs from other industries. Taking a more rigorous approach to the data, the contribution of the game shooting industry to GDP would be no more than the £267 million calculated for GVA at market prices (2014). This figure has been calculated using PACEC data for participants' direct spend.

**Table 1. Methodological issues raised in our review**

- Disguised methodologies
- Lack of transparency
- Omissions
- Employment figures
- Subjectivity of samples and lack of independent verification
- Lack of independent testing of approaches and datasets
- Problems of totalling up local and regional studies to give a national figure

There is a problem with defining the industry since there is no Standard Industrial Classification (SIC) for the sector. There are 35,000 direct jobs in the industry (PACEC, 2014) but an analysis which widens the scope of the industry to include relevant first round suppliers suggests total jobs could be 42,000 (Cormack & Rotherham, 2014). Since this is one seventh higher in terms of jobs, GVA could be increased by this factor to give an estimate of £267m x 7/6 = £311m (ONS/*Treasury Green Book* approach). Of course this does not include any multiplier effects, but even with this the maximum would be £311m x 2.4 = £746.4m, assuming all second and third round *etc* expenditure would not take place if the industry did not exist. **This seems highly unlikely, but it suggests a range of ‘values’ for the sector at between £267m and £746.4m according to standard Treasury guidance.**

**Table 2. Other issues noted in our review**

**Problem with displacement – of other economic activities e.g. leisure and tourism, agricultural activities, nature conservation *etc***

**Import / export of services and products**

- e.g. overseas raising of pheasant chicks
- e.g. other materials, products and services

**Dead weight issues**

What would happen in the absence of the intervention i.e. without sports shooting

**Tax and subsidy issues – questions are asked about how shooting meshes with other land management and issues of subsidies *etc***

Any study of countryside activities and economics is fraught with complications of a diffuse sector and a lack of rigour, uniformity or replicability in the collection of data. Indeed, this is a problem we have encountered in previous reviews we undertook of countryside recreation and sports.

This does not invalidate the basic assertions but makes the size of the contributions untenable. There are basic methodological issues, particularly when summing datasets to produce a gross national value, and in the need to subtract ‘*deadweight*’ of economic

activities that occur without this ‘*intervention*’, and contributions to the totals which are actually ‘*imports*’. The latter would apply to chicks raised and imported from France for example, or equipment not manufactured in the UK. A problem is that advocacy statements on sectoral economic impacts frequently give business figures based on turnover and not on profits, in which case a significant amount may be, in reality, activity occurring abroad and not in the UK.

## **A comparison of the 2006 & 2014 PACEC reports**

### **Differences between the two reports**

1. The overall figures presented have changed with the update and the issues arising are discussed in our main report.
2. The titles differ – 2006 was about impacts but 2014 was only about benefits; 2014 included social benefits but 2006 did not.
3. In 2006, PACEC use the phrase ‘*GVA supported*’ which they amend to ‘*GVA attributable*’ in 2014. Neither phrase is an accepted economic category.
4. Contingent valuation was used in 2006 to estimate social and environmental costs and benefits but is dropped in 2014. There was no mention of any social or environmental cost in 2014 and the focus was entirely on the benefits. The use of ‘*Happiness Economics*’ and the ‘*Big Society*’ approach does not lend itself to valuations.
5. PACEC 2014 added provider income data (not presented in 2006) but this did not tally with participant spend, and no account was given for this discrepancy.
6. The PACEC 2006 report provided revealing information about the questionability of the survey data in the appendix. This discussion is omitted in the 2014 report, but there is no reason to suppose there has been any improvement.
7. The 2014 report presents detail about the methodology for allocating GVA by region, which is clearly rather simple and naïve.

### **The future & the context**

The two PACEC reports address issues of particular importance in the rural economy and the rural environment. Furthermore, the task of drawing together such a body of information is to be commended. The difficulty perhaps, is that the processes of economic studies are not obvious to most readers and therefore much can be presented as apparently robust and reliable when in fact that may not be the case. Additionally, these issues become especially problematic when combined with policy advocacy. Overall feedback from the expert panel we used, was that the general status of the two reports was they were large, impressive, and generally robust but with significant weaknesses or flaws in some areas. Many of the problems are probably unavoidable in dealing with a sector, which is not clearly defined and distinct within the national economy. In this case, the main lesson is that the figures presented

must be viewed with caution and, where possible, a lower conservative band should be applied. Our rigorous review in the Main Report (2014) presents upper and lower bands for reasonable values for the sector, which we suggest might be a range of ‘values’ for the sector **between £267m and £746.4m** according to standard Treasury guidance. However, this is not based on our own primary research but on the PACEC calculations which we find wanting. We have not done any primary research to ascertain the correct figures, but have subjected the data presented by PACEC to recalculation using standard guidance from the *Treasury Green Book*. So we can say that, based on their data we find a very broad range of potential ‘values’ but they have estimated at the top end of that. We suggest a value somewhere between the two extremes and a conservative estimate would place it towards the lower band.

Local and regional studies of impacts of sports, recreation, leisure, and tourism activities highlight the potential positive impacts on economies and communities at that level. However, there can be serious issues and problems consequent on merely summing such findings and applying to the national economy of UK-plc. Matters of import and export to the local, regional and national economies are also significant considerations. The PACEC study does not really address these issues.

The context of the sporting activities may also be very significant, and the subtlety of this is lost in the grand scheme of the PACEC study. Therefore, a shoot operating in a remote rural landscape, if managed sustainably, may be a major contributor to the local economy. In a more accessible lowland site, this benefit might reduce and displacement effects become more significant. From an economic viewpoint, a key is to develop good practice to maximise benefits and to avoid site deterioration and dis-benefits.

In evaluating the economic, environmental, and social impacts and effects of an activity or of activities, it is essential to consider displacement and deadweight issues. Essentially, this relates to what might have happened if the ‘*intervention*’ or activity had not taken place. The net effect or ‘*value*’ is the difference between the two. In such cases, issues like the scale of the activities become significant if they exceed ‘*Carrying Capacities*’ or operate beyond the ‘*Limits of Acceptable Change*’ and so displace other positive activities. Obvious examples are the impacts of other countryside activities such as wildlife leisure and tourism or other outdoor sports, which may be displaced by shooting. These issues raise matters, which undoubtedly lay beyond the remit of the PACEC commission, but they do need to be noted as riders on any interpretation of the findings.

Finally, it is abundantly clear that we need transparency of approaches, datasets and evidence so that claims can be rigorously tested and evaluated, agreed methodologies and audit protocols to guide decision-makers, and effective regulatory frameworks. To date, few of these are in place or effective.

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