

2. LITERATURE REVIEW

2.1 A Sprawling Subject

Within the large body of environmental literature, there is a huge subset on the agri-environment and policy surrounding it, including the “economic instruments” of environmental incentives and payments. The Bibliography section of this report contains a partial list of the theory and case study on this topic. The International Institute for Sustainable Development regularly publishes current abstracts in electronic form about many aspects of sustainability, including environmental payments. OMAFRA has also provided this project with an extensive bibliography of sources in CD form. Selections from this have been made in hard copy for this project.

Even a casual look at these bibliographic sources will show that global interest and study of the environment, including the agri-environment, is literally exploding. To thoroughly review the literature of this enormous body would be a massive undertaking. This review, then, will concentrate on selected influential contributions on agri-environmental payments in the US, EU and Canada. An interesting source relating to other OECD countries is included as well. Certain aspects of American and EU programs have been dealt with in my work for CFFO elsewhere (e.g. 2001 CFFO Convention, *Earthkeeping Ontario* articles, Agricultural Odyssey Group transcript, workshops and policy meetings).

2.2 Perspectives on Environmental Payments

Current concepts and theory surrounding environmental payments emerge from a large number of sources and from many perspectives. For example, there are many editorial opinions from the farm press and other ephemeral sources which perhaps deserve a separate treatment as *apparent* examples of grass-roots responses. While these are important, agri-environmental payments clearly lie within a wide and comprehensive public context. Most of this public process now includes extensive input from individuals and organizations of civil society, including farm organizations.

One perspective which has not received much treatment in this report is the Christian stewardship values held by the CFFO. This will need much more study and reflection in view of unfolding trends in agri-environmental policy (see section 3. Justification for the Need for Wider Society to Share in the Costs of Agri-Environmental Payments through Public Spending). While private stewardship values and practice remain prominent in the conservation literature, the CFFO's dedication to Christian stewardship principles must be seen against the growing involvement of government and non-government agencies in the agri-environment. This involvement will doubtless remain thoroughly secular. It is beyond the scope of this research to reconcile any conflicts and contradictions this reality poses.

The major academic perspectives on the agri-environment are:

- agricultural economics;
- environmental economics;
- international trade policy;
- environmental law and public administration.

Each is touched on here, but the perspective and methods of agricultural economics tends to dominate the published literature. It has also dominated public policy in North America, until quite recently.

From the economic perspective, environmental payments are one of several “economic instruments” used by public bodies to encourage a desired outcome. This outcome is usually both environmental and economic, the latter to enhance the long-term economic viability of the farm. Decision-makers attempt to achieve these outcomes through financial incentives to farmers.

Closely related to agricultural economics is the perspective of environmental economics. However, this approach emphasizes the non-use values of the environment as a “public good” and attempts to describe, measure and integrate these into economic modelling for policy purposes (see section 7. Establishing Prices, Costs And Eligibility For Agri-Environmental Payments).

The importance of international trading policy may not be underestimated in the construction of agri-environmental policy. Edwards and Fraser (2001) provide expert commentary on the place of agri-environmental payments in world trade. Simply put, the concept of agri-environmental payments is currently considered “trade-friendly” under the World Trading Organisation (WTO).

The WTO is the successor to the General Agreement on Tariffs and Trade (GATT). The policies constructed under GATT’s Uruguay Round, which concluded in 1993, remain largely intact under the WTO. From this view, most agri-environmental payments are forms of “domestic support” to agriculture. These forms of support were placed into the “green box” not the “blue box” in the GATT negotiations, that is, they are

not considered trade distorting. The trade perspective has important national policy ramifications for Canadian agricultural trade. Canada remains as firmly committed to agricultural trade now as it did at Confederation in 1867.

Agri-environmental law and public administration perspectives generally occur in a national, not an international, context. Both of these perspectives recognize the trade-off which must be negotiated between law, custom, political will and civil rights; that is, between the private property owner, society and the state.

Most of the above policy directions in the developed world now occur within an overarching ideal of sustainable development. This includes concepts of social and economic sustainability as well as sustainability of natural resources and the global environment (see section 3.2 Sustainable Development and the Agri-Environment).

Apart from the above general perspectives, outlooks on environmental incentives and payments vary greatly between countries and within countries. These differences depend as much on subjective social and political values held by the population as they do on *apparently* objective and rational economic and scientific theory. In this case, a country's domestic and export policies are important elements of its agri-environmental payments structures.

There is a sizeable difference in outlook between the United States (US) and the European Union (EU). These two jurisdictions have the longest experience with comprehensive agricultural support, including incentive payments for conservation or environmental purposes. They are both well-advanced in promoting the idea of agri-environmental payments (e.g. USDA, 1996; Dobbs, and Pretty, 2001; Dubgaard *et al.*,

1994). Clive Potter (1998a), a major British rural scholar recently reviewed the road to reform taken in both areas.

Experience in the EU and the US will undoubtedly be considered in agri-environmental planning and policy in Canada and probably in Ontario. We must keep in mind, however, that both the EU and the US maintain a commitment of heavy state support to agriculture in apparent defiance of WTO policy. This commitment is heavily criticized by many, including the Cairns Group of trading nations. Canada is a member of the Cairns Group. In principle, Canada would prefer to see an end to agricultural supports which distort international trade (see section 5.8.7 Cross-Compliance with other Support Programs).

2.3 United States

After many years of conservation practice and regulation (see section 5.2.1 The United States), the economic and policy dimensions of agri-environmental payments in the US are probably the most highly developed and fine-tuned in the world. They are firmly associated with an economic outlook which responds to the private landowner. Current thought is overwhelmingly dominated by the US Department of Agriculture (USDA) especially through the Food Security Act or “farm bill.” First enacted in 1985, this statute underpins the enormous federal support system to agriculture, partly through the Environmental Quality Incentives Program (EQIP).

Roger Claassen is a prominent agricultural economist employed by the USDA’s Economic Research Service. His (and co-authors’) recent contribution *Agri-Environmental Policy at the Crossroads: Gudeposts on a Changing Landscape*

(Claassen *et al.*, 2001) sets out policy design issues for agri-environmental payments within the context of a rapidly-changing international trading climate. This comprehensive review is intended to provide needed background for elected decision-makers in the farm bill debate. As of this writing, this debate is still in progress. The outcome will provide a decision on whether or not to expand the current US federal incentives to provide environmental payments for actual environmental “goods and services.” Claassen *et al.*’s report should be “required reading” for any policy-maker considering the question of environmental payments (see Appendix). Following are a few of its highlights.

The major thrust of current US programs is toward specific environmental targets, but farm income and equity issues for those who are already environmental “good actors” are also taken into consideration. Claassen *et al.* make the following recommendations for program design for optimising net environmental benefits:

- Spatial targeting, directing payments to would-be program participants who can achieve the largest environmental gains relative to costs;
- Producer flexibility, giving farmers the flexibility to select the lowest cost method of improving environmental performance in specific resource and management settings.

Claassen *et al.* further consider:

- Environmental effectiveness, or program design features that pay for changes in production management or conservation practice that most directly address environmental objectives;
- Information that will be needed to implement a given program design; and

- Administrative costs such as conservation planning, technical assistance, enforcement, and other costs that may be required to deliver the program;

and finally,

- Identify the potential for unintended consequences and suggest ways to minimize them.

This influential team managed to condense environmental program design choices into three major issues: How much is paid to whom for taking what action on what land? None of these questions is easily answered (see Claassen *et al*, 2001, page 32 for an important discussion of these considerations).

The American Farmland Trust's Center for Agriculture in the Environment (CAE) publishes articles relating to agri-environmental benefits in its Working Paper Series. Sandra Batie, (2001) is a prominent contributor. Other pertinent papers in this series include Korfmacher and Elsom (1998), Sohngen, (1998), Ervin (1998) and Day (2001). All of these papers are available in pdf format at <http://www.farmlandinfo.org/cae/wp/caewpabs.html>.

From a political and trade policy perspective, Batie's (2001) article *Green Payments as Foreshadowed by EQIP* reviews the USDA's EQIP program as a basis for agri-environmental payments (or "green payments" as she puts it) to American farmers as an alternative to commodity payments. EQIP, according to an OMAFRA description (OMAFRA, 2001 - 1996 U.S. Farm Bill Analysis) packages four programs into one to provide technical assistance, cost-shared payments and other incentives to farmers facing threats to soil, water, grazing land, wetlands and wildlife habitat. Batie emphasizes the fact that EQIP and its constituent programs are primarily for environmental enhancement,

not as a replacement for commodity supports. She raises a number of geographical and economic issues which she feels will prevent EQIP from replacing commodity supports. She, however, urges more attention to the question in order to prevent undue statutory regulation of the agri-environment:

Furthermore, and significantly, the demand for improved agro-environmental performance appears to be accelerating. It may well be that unless such improvement is forthcoming, regulations will be imposed on agriculture to meet new environmental standards. Green payments could be used to mute those demands by achieving improvements voluntarily, or to offset the costs of meeting new regulations.

Batie, 2001, p. 17

The farm bill, being guided through the US government by Iowa senator Tom Harkin contains a proposal for a Conservation Security Act which would be decoupled from commodity programs and which would pay farmers and ranchers for a broad spectrum of accepted conservation practices (Phillips, 2001). The massive payments it proposes now generate considerable controversy both in the US and elsewhere. The extensive use by the US of environmental program incentive money in cross-compliance with its massive commodity program is now under fire by the international trading community, including analysts at ABARE, an Australian think tank (ABARE, 2001). Australia, like Canada and many other mid-sized agricultural trading nations is a member of the Cairns Group.

Apart from the American national picture on environmental payments, a large number of State, regional and initiatives in the agri-environment exist. One of the more interesting is the comprehensive scheme to protect the drinking water supply for New Year City. This includes watershed management with whole farm plans and

environmental incentives to farmers for best management practices in the Catskill Mountains. This is the major watershed from which the city draws its water. This “local” (albeit large) approach clearly sets a high standard for practice elsewhere, including Ontario rural communities which rely on groundwater. The Oak Ridges Moraine as a source of water to municipalities in the Greater Toronto Area is an analogous situation.

2.4 European Union

Some countries in Europe have implemented agri-environmental payment schemes for many years (e.g. Eklund, 1999; Onate, 1998; Morris and Potter, 1995; Wilson, 1994; 1995). Since 1992, however, a major reform of the Common Agriculture Policy (CAP) unifies the concept under mandatory programs for all 15 member states. Potter (1998b) provides a detached review of the policy environment of Europe in the lead-up to this major reform in agri-environmental and agricultural subsidy policy in Europe.

These changes are embodied in Agenda 2000, a reform of CAP (Europa, 2001). This reform, along with associated regional rural development policies, is firmly pinned to environmental and socio-economic sustainability. This involves a shift of support from production and commodity subsidies to income and sustainability. It means that production will be deliberately decreased through various methods of “extensification” and “multifunctionality” (see Glossary). Agenda 2000 will change the face of agriculture, rural social planning and the environment in all EU member states. It is perhaps important to note that the EU will regulate a *minimum base of environmental*

performance for which no compensation will occur. Beyond that, however, incentives and environmental payments will be generous.

Several websites of the European Commission offer information on the comprehensive social and economic approach which Europe has adopted. I have obtained hard copies of several of these, such as “Agriculture” which explains the historical and legal basis of the CAP (citations under Europa, 2001). One describes and evaluates the program in full: *State of application of regulation (EEC) no. 2078/92: Evaluation of Agri-environment Programmes* (Europa, 2001).

There are many other independent commentaries available on the EU program, some quite critical of Europe’s outlook. England, for example, has had a long independent history of rural countryside management notable for the many conflicting perspectives among stakeholder groups. However, the recent *UK Farming and Food Policy Commission Report* (DEFRA, 2002) clearly demonstrates the direction which the UK will likely fully embrace. There is little to indicate that the UK governments will buck the European Commission or the trajectory set by Agenda 2000 under CAP.

The changes underway in Europe are part of what is known to rural scholars as the “post-productivist transition.” This involves a deliberate turning away from the “productivism” which has driven policy in Europe in the past. Productivism is the ideology which holds that increasing production is the only consideration in the ethical conduct of agriculture. It is evident that much of agriculture in North America, including Ontario, remains productivist and anti-environmental at heart. This will surely confound efforts to implement progressive agri-environmental payments policies. The emerging

vision of the CFFO, however, does contain some elements of the post-productivism which Europe has embarked upon.

2.5 Canada

While agri-environmental concern itself is high in Canada, the concept of specific payments for environmental goods and services remains relatively undeveloped. Most of the incentive programs described in this report were not designed with this mechanism in mind. John Pierce (1996) of Simon Fraser University provides a general review of the conservation challenges facing decision-makers in constructing policy for the non-use values associated with the environment.

McRae *et al.*'s (2000) report *Environmental Sustainability of Canadian Agriculture: Report of the Agri-Environmental Indicator Project* (2000) provides a systematic province-by province review of Canada's agri-environment. It will likely set the pace for future federal policy initiatives. They note that the agri-environment has been largely unregulated in this country but also that regulation by the provinces and municipalities is rising. Outside of the municipal and provincial activity in Ontario, both Alberta and Quebec are both active in regulation of the agri-environment. Quebec now has stringent environmental laws, but also offers particularly generous incentive programs.

McRae *et al.*'s report notes that domestic support to Canadian farmers has fallen in recent years but that environmental "goods and services" may remain a viable mechanism. Otherwise, it suggests that the government will continue to rely on largely

voluntary adoption of best management practices and environmental farm plans to achieve many aims.

2.6 OECD Countries

The Organisation for Economic Cooperation and Development (OECD) publishes many works pertaining to agricultural policy. One recent publication *Environmental Indicators for Agriculture* provides a good summary of approaches and practices in member countries for use in policy formation. It includes a discussion of agri-environmental expenditure in a number of member countries (OECD, 2001, p. 68 ff) and tabulates the public and private schemes for conservation of biodiversity, habitats and landscape related to agriculture for 1998. I have reproduced them below. These tables provide great insight into how far advanced some countries are along the road to sustainability and Canada' standing among them.

Annex Table 1. Public and private schemes for conservation of biodiversity, habitats and landscape related agriculture: 1998

Name of the scheme	Public/ Private	Main objective	Area covered ('000ha)	Share of total agricultural area	1998 Domestic currency ('000)	1998 US\$ ('000)
Austria						
Landscape						
- Mountainous and less favoured areas	Federal/Provincial Government	Open farming landscape	1 214	35%	2 906 600 (1997)	238 301
Canada						
Habitats						
- North American Waterfowl Management Plan	Federal Government	..	..	..	9 871 (1997-98)	6 882
- North American Waterfowl Management Plan	Provincial Government	..	..	..	9 894 (1997-98)	6 898
- North American Waterfowl Management Plan	Private	..	..	..	3 562 (1997-98)	2 483
Denmark						
Biodiversity						
-Genetic diversity in farm animals	Public	Biodiversity	..	..	1 600	239
Landscape						
- Nature management	Public	Nature protection	1.251 (1995)	< 1%	124 500 (1995)	22 216
- Nature conservation	..	..	0.194 (1995)	< 1%	..	..
- Nature restoration project	..	..	0.552 (1995)	< 1%	..	..
- State owned areas	..	..	0.182 (1995)	< 1%	..	..
- Wildlife plantation scheme	Public75%/Private25%	To help wildlife in general	0	< 1%	6 000	896
Finland						
Landscape						
- General Agricultural Environment ProtectionScheme (GAEPS)	Public	Both these scheme (GAEPS and SPS) cover a range of objectives, including, for example, management of manure and pesticides, managing and enhancing biodiversity and landscape	1 875	69%	1 372 000 (1997)	264 507
- Supplementary Protection Scheme (SPS)	Public		173	6%	195 000 (1997)	37 594
Germany						
Landscape						
- Landscape conservation areas	Public	..	8 798	51%	..	..
- Nature protection areas	Public	..	685	4%	..	..
- National parks	Public	..	727	4%	..	..
- Biosphere reserves	Public	..	1 249	7%	..	..
- Nature parks	Public	..	5 679	33%	..	..
Greece						
Landscape						
- Landscape elements maintance ¹	Public	Maintenance of terraces	..	..	5 000 (1993-97)	5 592
Japan²						
Landscape						
- Yusuvara village	Public/Private	Landscape, soil quality	..	..	4 000 Yen/ha	31/ha
- Kiwa village	Public/Private	Landscape, soil quality	..	..	3 000 Yen/ha	23/ha
- Wajima village	Foundation	Landscape, soil quality	..	..	2 620 Yen/ha	20/ha
- Yuhin village	Municipal	Landscape	..	..	60 Yen/ha	0.458/ha

Annex Table 1. Public and private schemes for conservation of biodiversity, habitats and landscape related agriculture: 1998 (cont.)

Name of the scheme	Public/ Private	Main objective	Area covered ('000ha)	Share of total agricultural area	1998 Domestic currency ('000)	1998 US\$ ('000)
Netherlands						
Habitats						
- Extensive pasture land	Public	Biodiversity conservation.	58	3%	41 000	20 660
- Extensive field margins in cropped land	Public	Biodiversity conservation.	0.5	< 1%	1 500	756
- Fallow lands	Public	Biodiversity conservation.	12	1%	300	151
- Wet ditches, wetlands	Public	Biodiversity conservation.	75	4%	300	151
Landscape						
- Landscape conservation subsidy scheme	Public	Conservation of valuable landscape elements.	..	..	1 000 (1995)	623
- Landscape and farmyard planting scheme	Public	Planting new elements in the landscape on farms and in the farmyard	0.15	< 1%	2 000 (1995)	1 246
- Provincial schemes for maintenance of landscape elements	Public	Support for farmers who maintain valuable landscape elements. The scheme operates at the provincial level.	..	..	4 700 (1995)	2 928
Norway³						
Habitats						
- Maintenance and development of agricultural landscape	..	Expenditure for biodiversity and semi-natural habitats.	17 (1998)	2%	14 600 (1995)	2 304
- Extensive grassland	..	Biodiversity.	0.128	< 1%	800	106
- Extensive pasture land	..	..	14	1%	14 500	1 922
- Hedges and woodland	..	Investment grants for environmental measures.	49 areas	..	3 500	464
- Other semi-natural habitats types:	..	Expenditure for biodiversity and semi-natural habitats.	2 047 areas	..	6 500	861
<i>e.g.</i> Wetlands and mires for fodder, grazing...	..	Acreage not available at national level now.	146 areas	..	1 500	199
- Wet ditches, wetlands	..	Prevent runoff from agricultural land.	30 objects/areas	..	2 500	331
Landscape						
- Support for maintenance and development of agricultural landscapes	Public/30-50% Private	Annual and/or lump sum expenditure. Conditions: usually no fertilizer or pesticide. Geographic and thematic priorities by the country authorities. Area data aggregated to national level from 1997.	2	< 1%	77 700	10 298
- Preservation of protected and listed farm buildings	Public 35%	Lump sum expenditure.	370 objects (1995)	..	15 (1995)	2
- Local management of areas given priority for landscape and environmental support	Public/Private	Lump sum expenditure for planning, information, coordination, maintenance plans. Coordination of support from other schemes for each area dependent on purpose. Areas of priority by the county authorities. Project period 3-5 years for each area. Bottom-up organization and management. 10 projects 1993-6 in 4 counties, 3 mill kr/year(0.4 mill US\$/year). 1998 start year for projects in all counties. Area not aggregated to national level	c. 50 projects	..	12 000	1 590
- Information, research, monitoring and education. Public projects on agricultural landscapes	Public	Annual expenditure. Started with a campaign, "Living Landscapes" 1988-89. Research programme from 1991-95.	..	..	6 500	861

Annex Table 1. Public and private schemes for conservation of biodiversity, habitats and landscape related agriculture: 1998 (cont.)

Name of the scheme	Public/ Private	Main objective	Area covered ('000ha)	Share of total agricultural area	1998 Domestic currency ('000)	1998 US\$ ('000)
Norway (cont.)						
Landscape (cont.)						
- Projects for maintenance of agricultural landscapes	..	Lump sum expenditure. 2-3 year projects.	..	..	4 00	530
- Deficiency support fro summer mountain farms	Public	Annual expenditure. Fixed payments per farm. Number of transhumance farms/summer mountain farms supported. Dairy production minimum 4 weeks each summer. Area not aggregated to national level.	2 719 farms	< 1%	19 800	2 624
- Support for livestock grazing on extensive pastureland		Annual expenditure. Grazing minimum 8 weeks each summer out of field land. No fertiliser, no spraying, natural vegetation with heather, shrubs, bushes and/or trees, low animal density. New scheme 1998. Included in acreage and cultural landscape scheme before 1998.	..	..	184 (support from 1990)	24
- Area and cultural landscape schemes	Public	Annual expenditure. Cross-compliance scheme. Per-hectare payment aimed at reducing the intensity of production and conserving cultural landscapes. From 1991, approximately 1/3 has landscape effect. Support for farming steep slopes and basic area support for organic farming are included.	1 050	102%	3 955 000	524 165
- Support to organic farming	Public	Annual expenditure. Objective is to enhance ecological farming. Effect on biodiversity and habitats? Assume there is an effect on biodiversity and habitats because of more crop rotation and no use of artificial fertilizer. Since 1990, basic area support included in Area and Cultural Landscape Scheme. Information and research included.	11	1%	13 200	1 749
- Investment grants for environmental measures	Public/Private 30%	Lump sum expenditure or loan. Main objective is to prevent runoff from agricultural lands. Totals reported here: 1. Support for planting vegetation to complete existing green structure and increase the variation in the landscape. 2. Support for ecological purification systems: Constructed wetlands and vegetation zones.	..	..	6 000	795
Poland						
Landscape						
- Restoration of agricultural land	Public/Private	Restoration wasteland and peatbogs into farm management.	2	< 1%	1 858	532
- Fertilisation of soil	Public/Private	Soil liming.	26	< 1%	2 510	719
- Measurements against erosion	Public/Private	Field amalgamation.	0.026	< 1%	90	26
- Small water retention	Public/Private	Building storage reservoir.	0.451	< 1%	2 231	639

Annex Table 1. Public and private schemes for conservation of biodiversity, habitats and landscape related agriculture: 1998 (cont.)

Name of the scheme	Public/ Private	Main objective	Area covered ('000ha)	Share of total agricultural area	1998 Domestic currency ('000)	1998 US\$ ('000)
Portugal						
Biodiversity						
- Douro vineyards	Public	Protection of the douro vineyards landscapes stone wall terraces.	9	< 1%	360 000 000 (1994-1996)	2
- Orchards of traditional varieties	Public	Protection of traditional orchards.	3	< 1%	161 000 000 (1994-1996)	1
- Traditional livestock breeds	Public	Support for traditional livestock breeds threatened by extinction.	..	..	1 037 000 000 (1994-1996)	7
- Traditional almond orchards	Public	Protection of traditional almond varieties to avoid loss of rural communities.	13	< 1%	198 000 000 (1994-1996)	1
Landscape						
- Maintenance of traditional agricultural systems	Public	Avoid loss of rural communities.	439	11%		46
Spain						
Landscape						
- Leader and Proder	Public	Restoring traditional rural buildings.	..	..	2 750 (1999)	15
Sweden						
Biodiversity						
- Red beans	Public	Maintain traditional cultivation of local varieties.				
- Endangered local livestock breeds	Public	To guarantee the survival of live stock breeds.				
Habitats						
- Extensive ley and mowed meadows	Public	Biodiversity, cultural, water quality.				
- Conservation in semi natural grazing land and maintenance of an open landscape ⁴	Public	Biodiversity, cultural, open landscape.				
- Fallow land-area financed by EU	Public	..				
- Wetlands and ponds	Public	Biodiversity, water quality.				
Landscape						
- Nature conservation areas (agricultural land)	Public	Biodiversity, cultural.				
- Perennial ley farming	Public	Water quality, open landscape.				
- Conservation of biodiversity and cultural heritage	Public	Biodiversity, landscape.				

Annex Table 1. Public and private schemes for conservation of biodiversity, habitats and landscape related agriculture: 1998 (cont.)

Name of the scheme	Public/ Private	Main objective	Area covered ('000ha)	Share of total agricultural area	1998 Domestic currency ('000)	1998 US\$ ('000)
Switzerland						
Biodiversity						
- Gene banks	Public/ Private	Conservation of genetic information.	..	..	300	207
- Conservation of local breeds	Public/ Private	Conservation of cultivated plants diversity.	..	..	1 000	690
- Pest control (Pou de San Jose)	Public	Pest control (eradication through quarantine).	2	< 1%	400	276
Habitats						
- Ecological compensation, conservation of habitat diversity	Public	..	..	..	113 600	78 358
Landscape						
- Ecological compensation	Public	Conservation of species diversity and landscape diversity.	89	6%	100 900	69 598
- High fruit trees	Public	Conservation of species diversity and landscape diversity.	2 700 (trees)	< 1%	37 400	25 798
- Support for transhumance	Public	Support for transhumance on alpine pastures: conservation of biodiversity and landscapes.	306	19%	66 900	46 146
United Kingdom						
Landscape						
- Environmentally Sensitive Areas	Public	Wildlife, Landscape, Historical	501	3%	32 984	54 660
<p><i>Note:</i> The share of total expenditure on biodiversity, habitats and landscapes as a percentage of total Producer Support Estimate (PSE) for 1998 is as follows: Canada: < 1%; Norway: 20%; Poland: < 1%; Switzerland: 4%; and EU: <1% (the % for EU is higher than shown here as only 9 member States are included in this calculation, while the PSE covers 15 Member countries).</p> <p>c. Circa</p> <p>.. Not available</p> <p>1. The domestic currency is the EURO 2. Not a comprehensive list. 3. Figures refer to public expenditure only. 4. The same programmes are included for landscape and habitats Sources: OECD Agri-environmental Indicators Questionnaire, 1999; OECD (2000).</p>						