One might argue that this example illustrates precisely why things should change. Economic valuation of public goods and environmental services certainly allows for a better understanding of what is at stake. But one must also be aware that in order to make the market change from a public perspective (i.e. a different distribution of payments which should grant public goods) or a private one (i.e. an efficient habitat bank system), you cannot count on the invisible hand. Making the market work for nature requires a lot of public effort in setting the value of assets, in controlling, in punishing those who do not respect their contract, and so on.

If you look to private money for funding, you will have to argue why involving a private company in a habitat banking scheme should be more effective than a tax used for environmental policy. It needs to be quite clear what you want to defend in order to value extensive farming as much as intensive farming. It is anything but easy to defend in a proper way, despite the hope that dealing with economy and markets involves less conflict than dealing with policy! In fact, it requires the same kind of energy as was needed for 'nature conservation' in the old days, because the

actors who are against an efficient public goods policy are the same as the ones that were against nature conservation.

Economic versus the ethical

Those of us who are interested in conserving biodiversity must ask whether using the public goods concept is the best strategy to achieve our goals in a world dominated by short-term economic thinking.

Might we not argue a contrary position? Isn't the strongest point of nature conservation the fact that it is *above* economy for many actors, including some policy makers. Patrick Blandin, a French researcher working on nature conservation, reminds us that in 1923 the first International Congress for Nature Protection (the ancestor of IUCN) already illustrated the two lines of argumentation – the economic versus the ethical – asserting that nature value was not comparable with economy.

Nearly a century later, the two streams are still present and have led to different approaches, with variable success for each camp (from protected areas to agrienvironmental measures). However, this historical view is useful in order to stand

back from an over-optimistic belief in economically-based lines of argumentation for nature conservation, which at the present time take the form of public goods and ecosystem services. It is probably a convincing tool for raising awareness, but when it comes to practical options, it can lead to counter-productive approaches if it fails to recognise that a nature market needs a strong nature policy.

Nature conservationists will still have to fight. If they choose to make war on the economic battlefield, they still need to be conservationists. To paraphrase Clemenceau: 'Ecology is much too serious a matter to be left to economists'...alone.

As Redford & Adams (2009) rightly point out, 'Conservation has a history of placing great faith in new ideas and approaches that appear to offer dramatic solutions to humanity's chronic disregard for nature (...) only to become disillusioned with them a few years later. The payment for ecosystem services framework fits this model disturbingly well.'

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Redford, K H, & Adams, W M 2009 Payment for Ecosystem Services and the Challenge of Saving Nature. *Conservation Biology* 23: 785-787

European grassland birds in a global context



Farmland: a major bird habitat

While working on our book Farmland Birds across the World (see the review opposite), BirdLife International provided us with their statistical database categorising birds according to their most important habitats.

To our astonishment, more than one third of the world's bird species (3,600

out of 10,000) were classified as farmland birds. Farmland is the third most important terrestrial bird habitat after forest and scrubland. For some species, farmland is their primary habitat, while for many others farmland is a surrogate for their lost, more natural habitats. Nevertheless, this status calls for targeted stewardship.

With 331 farmland species, Europe

(excluding Russia) holds a relatively small share (9%) of the world's farmland birds. The first explanation lies in its modest territorial area. Europe has only 3% (89 million ha, excluding Russia) of the world's grasslands. Within the EU, permanent grasslands cover 55 million ha, corresponding to 13% of its territory and 30% of its farmland.

The second reason is Europe's high proportion of forest cover (45%). If we compare Europe to Africa (see table below), the differences become clear. In fact, when applied to every continent, the negative relation between the number of farmland birds and the forest cover was found to be rather linear.

	Europe	Africa
No. of farmland species	331	1,136
Farmland area (millions ha)	474	1,157
% of farmland species	21	49
% of forest area	45	21

Special position of grasslands

Compared with other farmland habitats, grasslands have a special position for two reasons. First, they include a wide range of types, from entirely natural to intensively cultivated. Although the same might be true for natural wetlands and rice paddies, for example, there are a number of bird species that have truly co-evolved with grasslands. Despite the limited area

of Europe's grassland, the degree of overlap with Europe's estimated 75 million ha of High Nature Value farmland area (75 million ha) is uncertain.

Secondly, and seemingly in contrast, grasslands are not particularly speciesrich. Although farmed grasslands cover two-thirds of the world's farmland, they host hardly one-third (1,100) of all farmland species. Interestingly, however, they contain relatively large numbers of individuals. One example is the famous Great Plains in the US, representing one of the world's largest (150 million ha) grassland areas. The Plains' 39 true grasslands breeders (including greater and lesser prairie-chickens, grasshopper sparrow, ferruginous hawk, lark bunting, eastern meadowlark, burrowing owl and longbilled curlew) represent a total estimated population of 750 million birds (20 million per species).

At the other end of the scale, some South African grasslands can support an amazing density of 170 species per 100ha.

Although about 1,100 species use grasslands as their primary habitat, only some 100 of these are entirely confined to grasslands. These include ostriches, nandus and bustards (all 'Old World' species!), seedsnipes, coursers, pratincoles, plovers, sandgrouse and larks.

Decline: a global phenomenon

The alarming BirdLife figures on the decline of Europe's farmland bird numbers are well-known: between 1980 and 2005 they fell by more than 40% in the old Member States, and by over 25% in the new ones. One cause is the rapid loss of grassland and grazers. The EU grassland area is declining by tens of thousands of hectares per year, due to urban development, conversion to other (e.g. energy) crops and desertification (fuelled by climate change).

Grazing animals are declining even faster: EU cattle numbers have fallen by 10% since 1995, and sheep (more likely to be kept in outdoor systems) by 20%. In addition, well-known factors such as over-extensification (e.g. undergrazing, abandonment), intensification (drainage, overgrazing, earlier, more large-scale and faster mowing), increased predation and flyway problems (e.g. hunting) have taken their toll. The overall result is a smaller area of more monotonous grassland, to the disadvantage of many birds.

These same causes of decline appear to be a worldwide phenomenon, but the mix differs by continent and country. In many Asian grassland areas, overgrazing as a result of population growth is now the dominant factor. The North American prairies suffer mainly from native as well as exotic invasive weeds and trees, enhanced

by the suppression of fire and natural grazing (e.g. by prairie dogs). In the South American pampas, grassland conversion to arable land (mainly soybean) and commercial forest is the primary cause of declines, the latter fuelled by tax incentives.

In Europe, the causes of loss of grasslands are getting more diverse as well. In past decades, intensification was supposed to be the major cause in northwest Europe, with over-extensification and abandonment in southern and eastern Europe. Whatever the truth of that, the picture is now much more complex: extensification and abandonment (partly due to the decoupling of farm support) also appear in areas such as the UK's uplands, in parts of Scandinavia and locally even in the Netherlands, while intensification is taking place in the better equipped parts of central and eastern Europe.

With the abolition of dairy quota ahead, the differences between European regions will probably increase. HNV areas will, generally speaking, hardly benefit, as their production costs are relatively high and many farmers and important infrastructures have already disappeared.

EU has key instruments

However, in contrast to many other continents and countries, the EU already has a set of policy instruments to support grassland birds. Worldwide, only the US, Canada, Australia and South Africa have been introducing grassland conservation

schemes including financial incentives. Many other countries still offer adverse incentives for grassland conservation. In Europe, targeted market initiatives, such as bird-friendly rice from the Ebro delta, are rare for grassland products.

The first target for grassland birds is to maintain the grassland area, and the second is to get it into or keep it in good condition for birds. Several EU Member States have introduced premia for permanent grassland, and some also for grazing (recoupling support to animals). These are promising initiatives, but still insufficiently targeted to grassland birds.

Agri-environment schemes can provide a valuable addition to these general premia, provided they become better targeted as well. The first challenge is to establish a regional rather than a farmscale approach, as bird populations are large and mobile. The second challenge is for a better distinction within bird communities of their ecological demands (not every species benefits by late mowing alone, for example), including the relevance of grazing to a substantial number of species. The third challenge lies in making a better distinction between the breeding and feeding function of grasslands, as the second still receives too little attention in the design of agri-environment schemes. The 2013 CAP reform offers excellent opportunities to implement such improvements.

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Farmland Birds across the World

This wonderful book does exactly what its title suggests and covers all the major farmland habitats of the world, from grasslands to rice fields and from arable land to agroforestry. Although a great deal of information is packed into the 130 pages of the book, this is not some dense scientific tome. On the contrary, the facts and figures are interspersed with a wide array of beautiful photographs and the text is also broken up by more than 50 large and small boxes explaining particular issues.

The editors underline that the intensification of agriculture

is a key threat to birdlife in developed countries, while the expansion of agriculture in developing countries is even more destructive (given that such expansion often takes place in natural habitats). But they also highlight two nature conservation paradoxes:

- in some cases, agriculture can provide a surrogate habitat for some birds species and can even be their last resort on the planet
- farmland which is managed to support such species may be less productive, indirectly
 increasing pressure on natural habitats and associated birdlife elsewhere. Hence,
 saving farmland birds can be detrimental to the birdlife of natural habitats.

The authors recognise that these can lead to confusion and a potential dilemma among conservationists as to whether it is best to allow the expansion of farming or the intensification of the existing farmland resource. Much of the final chapter is dedicated to this issue. As you may expect, there is no one easy answer, but the book does provide examples of what has worked and what could work. This gem of a book is well designed and well written, and will appeal to a broad audience. I recommend it wholeheartedly. It is also a bargain at €24 (plus shipping costs; ISBN 978-84-96553-63-7). Order from CLM (www.bookfarmlandbirds.com/order_now), or for those outside Europe, go direct to Lynx Edicions (www.lynxeds.com/product/farmland-birds-across-world). Davy McCracken

