September 2013

STATE OF NATURE REPORT

We are writing on behalf of brownfield practitioners' organisations and the Smart Growth movement in the UK in connection with the recent *State of Nature* report to which your organisation was a signatory.

We would like to say at the outset that we fully support the vast majority of what the report says and share the concerns of the State of Nature Partnership about its findings. As both practitioners of environmental science and campaigners for protection of the UK environment, we are daily aware of the pressure on wildlife in this country and wholly share your passion to protect it. Many brownfield practitioners are actively involved in wildlife conservation and have a great deal of expertise at both a theoretical and a practical level.

But while we wholly endorse the great majority of the *State of Nature* report and are anxious to do what we can to support the actions needed, we do have to raise with you our concern about the criticisms of brownfield reclamation policies contained in the report's Urban chapter and, in particular, page 59 on brownfield. This appears to imply that brownfield-first policy is harmful to wildlife and, whether intentional or not, leaves the erroneous impression that greenfield development is less environmentally harmful than brownfield. This may encourage those who advocate an increase in greenfield sprawl.

The report deploys a series of arguments against brownfield-first policy, some of which we believe to be invalid and others of which are used to draw invalid conclusions. We are disappointed that the report does not consider the consequences of favouring greenfield over brownfield which is highly damaging to the environment and sustainability. A brownfield-first policy can actually protect wildlife while greenfield, by contrast, is extremely damaging to it. The continuing shift of development from brownfield to greenfield is also causing significant damage to the wider environment.

Discussions within the brownfield sector and with organisations involved in the emerging UK thinking on smart growth, however, have generated a very long list of reasons why the report's criticisms of brownfield are both misplaced and damaging. They promote protection of brownfield sites for wildlife in isolation from wider environmental and social considerations and consequences. These reasons are complex and are summarized in the appendix to this letter.

The *State of Nature* report concludes that, although some wildlife bodies have carried out research and campaigns about brownfield, "there is a long way to go". We agree there is a need for research on brownfield issues, but we believe this is likely to lead to very different conclusions.

We are, therefore, writing to your organisations to seek a meeting to discuss our concerns and possible ways forward. These might include possible joint research or publications and discussion of ways in which the brownfield sector can further support the protection and promotion of wildlife.

We are sending this to all 25 members of the Partnership and we would welcome the responses of your organisations. We hope a meeting can be arranged in the near future to discuss a common way forward and are happy to host such a meeting.

Yours sincerely,

Andy Moffat
Chair
British Land Reclamation Society.

David Rudland,
Chair,
Land Quality Committee,
Environmental Protection UK.

David Hall,
Chair,
Society of Brownfield Risk Assessment.

Jon Reeds,
Convenor,
Smart Growth UK.

Appendix

STATE OF NATURE REPORT
THE BROWNFIELD SECTOR RESPONSE

We believe that favouring greenfield over brownfield development can be highly damaging to the environment and sustainability as a brownfield-first policy can actually protect wildlife. By contrast, greenfield development is extremely damaging to wildlife and the continuing shift of development from brownfield to greenfield is causing significant damage to the wider environment.

The Wildlife Benefits of Brownfield-First Policies

While there may have been cases where reclamation of a brownfield site has caused damage to a small number of species, some of which may indeed have been rare and endangered, this would usually have been the result of poor planning or practice. It is not an intrinsic consequence of land reclamation whose overall benefits are considerable:-

- **Soil quality**. Brownfield sites are often affected by previous industrial uses, leaving the soil in poor condition. A high proportion are contaminated, polluting soil, surface and groundwater and risking harm to plants, animals and humans. Left unremediated, this harm will continue.
- **Invasive species**. Some derelict sites may have nutrient-poor soils that temporarily prevent dominant plant species taking hold, providing habitats for certain species, but all too often they are big repositories of invasive plant species like Japanese knotweed, Himalayan balsam etc. and dominant native plants like bramble and encourage their spread (a risk identified on page 71 of *State of Nature*). The brownfield reclamation sector pioneered the fight-back against these threats to UK biodiversity and carries out the bulk of this work.

- **Transitory ecosystems**. Brownfield sites are often unstable, so diverse ecosystems which flourish for a while may be degraded by land instability, contamination, inappropriate human use etc.. Natural succession processes will eventually take place and fragile species' residence is likely to be short-lived. Intensive intervention can manage these processes but derelict sites are, by definition, not subject to such management. Limited resources are best targeted at sites deliberately reserved for nature in the long-term.
- **Soil protection**. Brownfield sites are often partially or wholly covered by hard standing or other structures which are both hostile to most wildlife and which prevent the soil carrying out its important ecosystem service functions. Reclamation can reverse this process and put the land back into productive use.
- **Wildlife conservation**. Well-designed brownfield developments can make space for nature in the development's green infrastructure and provide resources for its maintenance as, for example, the "sanctuary" at Pride Park in Derby.
- **Countryside protection**. Brownfield sites are primarily urban and most development pressure is on the fringes of existing urban areas, so prioritizing development on them reduces sprawl on to open countryside of all kinds, notably habitats like lowland heath, farmland and woodland which are highly attractive to greenfield house builders.

The Harm to Wildlife that a Shift to Greenfield is Causing

Greenfield development on the other hand, increased by displacement of activity from brownfield sites, is much more damaging to wildlife:-

- **Soil sealing**. Greenfield development causes soil sealing and compaction, irreversibly destroying this finite resource and the microbial biodiversity that relies on it and inhibiting the soil from carrying out its important ecosystem services.
- **Relative wildlife value**. Only a small minority of brownfield sites will be the refuges for wildlife (with as much biodiversity as ancient woodland and accommodating rare and endangered species) that is claimed in the report. In cases where they are, the species will have colonized from elsewhere in the environment, normally nearby greenfield sites. Incidentally most, or perhaps all, of the UK's rare and endangered species are also found on greenfield sites.
- **Relative ecological value**. The statement that brownfield sites lack statutory protection and only two are SSSIs reflects their general lack of ecological value. Putting sites in a protected "box" is seldom appropriate in a dynamic urban environment as they must be protected against natural succession, invasive plants, fly-tipping and anti-social human behaviour, pressures which are much easier to control in rural settings.
- **Natural networks**. The report's claims of the existence of a "network" of brownfield areas whose redevelopment would fragment them is a myth. Brownfield sites by nature are fragmented and dispersed around urban areas. It is greenfield sites and the network of biodiversity they support that are fragmented by development and their wildlife adversely affected by the disturbance, noise and light pollution that greenfield development brings.
- **Farmland wildlife**. If brownfield sites are refuges for wildlife displaced by agricultural intensification, the problem is the activity causing the displacement. Rather than waiting for haphazard occasions when displaced species happen to find brownfield sites that suit them, it would surely be better to work to continue progress in recent decades towards more wildlife

friendly agricultural practices. Displaced species, of course, often find refuge on greenfield sites too, until they are displaced by development.

- **Soil quality**. Although a few species benefit from the nutrient-poor soils or even the hard standings often found on brownfield sites, similar conditions also occur on greenfield sites . Most other species depend on richer soils, including the microbial populations in soil underlying the ecology which supports all wildlife and which suffer badly from greenfield development.
- **Planning policy**. In England, the assertion that greenfield land is often passed over for development in favour of brownfield ceased to be valid when the *National Planning Policy Framework* was imposed in 2012. English local planning authorities often now find their attempts to sustain brownfield-first policies undermined by viability tests and are having to release extensive greenfield land across a variety of habitats.

Wider Sustainability Concerns

The wildlife and biodiversity balance is thus plainly against greenfield development, but brownfield polices also offer a range of wider sustainability benefits which benefit both wildlife and the wider environment:-

- **Sustainable travel**. Concentrating development within existing urban footprints would significantly reduce our need to travel and, in particular, reduce our dependence on unsustainable transport modes and greenhouse gas emissions.
- **Climate change**. Greenhouse gas emissions need reducing by 80% to avoid catastrophic climate change which would be hugely damaging to wildlife of all kinds. Continuing to pursue dispersed, low-density modes of development inherent in greenfield expansion and leaving brownfield sites derelict can only increase this challenge.
- **Food production and land degradation**. Greenfield development destroys agricultural land, despite the UK's need to import about a third of its food. Destroying our farmland means the UK becomes more dependent on food imports, so more land in the rest of the world must be converted to agriculture to produce our food, often with significant damage to wildlife and less attention to the environment than British farmers are required to demonstrate.
- **Regeneration**. High levels of derelict land in many former industrial areas are a major symptom of economic decline, a source of blight and a deterrent to regeneration. They attract invasive species, fly tipping and anti-social behaviour and are significant deterrents to the inward investment that could provide the resources for protecting wildlife.