

Environment Act – ZSL responses to consultation on the setting of Environmental Targets under the 2021 Environment Act

27 June 2022

Question Topic: Target proposals for biodiversity on land

Do you agree or disagree that the proposed combination of biodiversity targets will be a good measure of changes in the health of our 'biodiversity'?

We disagree

[If disagree] What additional indicators do you think may be necessary?

From a species perspective, the targets correctly capture two of the three key aspirations we need to see, namely improvement in extinction risk and increasing abundance. However, there is a third dimension not captured which is to halt species extinctions nationally from this point onwards.

We could, in principle, achieve an improvement in extinction risk, even while species go extinct, and extinctions are irreversible. We therefore think it is crucial to include a target along the lines of "The human-induced national extinction of all known threatened species is halted from 2022". This would also bring the targets more in line with evolving aspirations for the global biodiversity framework. The UK also has an excellent process in place to measure this through its national Red Listing work.

We would also encourage more specificity than the current vague language of "improve" the England-level GB Red List Index and would encourage a quantifiable, trackable, target to be implemented instead.

Additionally, as a general principle all protected sites should be given greater protection from damage and harm on a local and cumulative level than is currently being aimed for in these targets. There is also the urgent need to expedite the timeline for expanding the number of protected sites. An increased level of ambition in target scale, scope and timeline will enable the UK Government to actualise its commitment to leaving the environment in a better state for the next generation.

Finally, for the Government to be understood as an international leader in this space, there is an urgent need for understanding and acknowledging our impact on biodiversity and nature overseas. To address this a target is needed that addresses our global footprint and inspires innovation in ways to address it.

Question Topic: 2030 and long-term species abundance targets

Do you agree or disagree with the level of ambition of a 10% increase proposed for the long-term species abundance target?

We disagree

[If disagree] What reasons can you provide for why the government should consider a different level of ambition?

First, no target derived from a baseline that is in the future is logically coherent. Indeed, this could result in biodiversity levels below those of today being considered to have met the target. This is inconsistent with the stated and laudable ambitions of the Environment Act 2021 and is out of step with emerging global biodiversity ambitions to achieve the Convention on Biological Diversity's 2050 goal of healthy and resilient populations of all species. The target also falls well short of the accepted need to aim higher to bend the curve of biodiversity loss for the sake of nature, climate and humanity. Rather, the baseline should be set at 2022.

Second, we need a 2022 baseline and a stretching target which reflects the scale of the nature recovery task ahead. For example, an increase in species abundance of 20% or 30% from 2022 to 2042, would genuinely put us on a trajectory for species abundance to be close to 1970 levels by 2050, which is the vision proposed by the late Dame Professor Georgina Mace and others to bend upwards the curve of biodiversity loss. This is the level of ambition we are calling for at the very minimum, rather than the one proposed as it would put the UK targets in line with the ambitions of the CBD on nature recovery by 2050

The governments new Environment Land Management (ELM)schemes and the Sustainable Farming Incentive (SFI) can and should play a vital role in reaching this target, so long as they are rolled out swiftly, with strong funding and focusing on targeted measures that supports farmers in sustainable land management.

Alongside ELM and SFI additional investment is also needed in targeted species recovery programmes which have been proven to be highly effective in both positive species impacts and value for money.

With the current rate of wildlife decline, wildlife abundance will continue to fall over the next decade, meaning that overall abundance levels are lower in 2042 than they are currently. This would result in the government falling far short of its commitment to pass on nature to the next generation in better condition than its current state.

Regarding the omission of marine indicators due to the mobile nature of the species, we would argue against this statement. Rather, a number of technologies and tools have been shown to be

effective for the monitoring of migratory species and other key taxa at low cost. These include bio-telemetry and observers/citizen science:

Bio-telemetry -

There are a very large number of reports on the tracking of migratory marine species using a range of tags that can collect enormously informative movement and environmental data (see here for further information e.g. <https://www.science.org/doi/10.1126/science.1255642>)

Indeed, the UK government is supporting work on a range of species using acoustic and satellite technology through agencies such as CEFAS and the Environment Agency.

Observer and citizen science -

Citizen scientists and/or observers are regularly used for monitoring marine mammals such as seals and cetaceans along with some shark species (e.g. <https://www.zsl.org/conservation/regions/uk-europe/thames-marine-mammal-conservation>). While these don't yield as much information as tagging surveys they can still be hugely helpful in understanding the spatial and temporal presence / movement of marine species.

ZSL would be happy to discuss and advise on the merits of valid approaches further.

Question Topic - Long-term species extinction risk target

Do you agree or disagree with the ambition proposed for the long-term species extinction risk target to improve the England-level GB Red List Index?

We disagree

[If disagree] What reasons can you provide for why the government should consider a different level of ambition?

We endorse the general intent of this target, and the use of the GB Red List Index for this purpose. However, the ambition requires a specific measurable target without which it is open to misinterpretation. Globally, the current GBF includes wording to reduce extinction risk by 20% by 2030 which is necessary if we are to bend the curve on biodiversity loss. We support calls that this target explicitly call "to reduce extinction risk by 30% by 2042". This would yield a demonstrated improvement in status over that time (~2.5% in the RLI by 2042). We emphasize that in order for the Red List Index to serve this purpose, the index must correctly accounts for genuine vs non-genuine changes. It should also suitably represent biodiversity, either through an adequate, random sample or through the inclusion of different taxonomic groups.

Vitality, a reduction in species extinction risk should sit alongside targets to scale up species abundance. This is essential for creating a full image of species health, but it should be noted that international cooperation will be central to effective conservation and data collection efforts, especially in the context of migratory species.

Question Topic: Long-term wider habitats target

Do you agree or disagree with the level of ambition of 'in excess of 500,000 hectares' proposed for the long-term wider habitats target

We disagree

[If disagree] What reasons can you provide for why the government should consider a different level of ambition?

We would encourage the scale up of the target from 500,000ha to 750,000ha as a minimum, which would bring the target more in line with the 30by30 target the government has previously committed to. We emphasize that as important as the size of habitat in the target is, it is also vital for these habitats to contribute to also supporting delivery of the species abundance and extinction risk targets. For this reason, we would also like to suggest that the wording of the target be amended to "to create or restore in excess of 500,000 hectares of a range of wildlife-rich habitat outside protected sites by 2042, directly contributing to species abundance and extinction risk targets, compared to 2022 levels"

ZSL would advise the wording of this target be amended to state "representative range", rather than simply "a range". This is to ensure that it is not weighted to habitats that are easier/cheaper to implement and address needs that have been identified in under-represented biomes.

We would also support the target putting an initial priority on addressing those habitats most at risk, damaged and in need of immediate investment.

The ongoing impacts of climate change also need to be considered when setting and implementing targets. Changes to our climate are a major threat to biodiversity but may also threaten and thwart the effectiveness of those measures put in place to retain, restore and protect biodiversity. At this time the current science does not allow for a full picture of how climate change may influence the effectiveness of nature-based solutions (NbS) in the protection, restoration and recovery of biodiversity. However, as the climate continues to change and become more volatile, the research does suggest this may have significant impacts on the effectiveness of NbS. (Pettorelli et al., 2021)

Current science and modelling does not allow for the downscaling of climate projections to the level of being able to predict local climate trajectories, in turn impacting the ability to assess how suitable areas may – or may not be – for NbS efforts. (Pettorelli et al., 2021) There is an urgent

need for research funding to better understand these impacts and fill these research gaps, and how they should influence policy making and implementation. Central to this is a need to counter the disparities between resources, time and funding for climate change mitigation and adaptation, versus those for biodiversity conservation (Barbier, Burgess and Dean, 2018) both in the UK and internationally. Going forward there is a need to understand both the biodiversity and climate crisis as being central threats to human development, thriving and survival – this should in turn be incorporated into joined-up policy making and target setting for the Government to be understood as a global leader in the space.

Finally, in general across this target, ZSL would encourage the government to also embrace wider ecosystem targets, as habitats are species-specific, and a more overarching set of targets is needed for ecosystem protection, restoration, renewal and growth rather than a sole focus on specific habitats in isolation. The current target framing is lacking any kind of ecosystem-level considerations and fails to build on the latest science and research on the matter, for example there is no target to address ecosystem collapse risk, as defined by the IUCN red list of ecosystems (more information can be found here - <https://www.iucn.org/theme/ecosystem-management/our-work/red-list-ecosystems>)

Barbier, E.B., Burgess, J.C. and Dean, T.J. (2018). How to pay for saving biodiversity. *Science*, 360(6388), pp.486–488. doi:10.1126/science.aar3454.

Pettorelli, N., Graham, N.A.J., Seddon, N., Maria da Cunha Bustamante, M., Lowton, M.J., Sutherland, W.J., Koldewey, H.J., Prentice, H.C. and Barlow, J. (2021). Time to integrate global climate change and biodiversity science-policy agendas. *Journal of Applied Ecology*, 58(11), pp.2384–2393. doi:10.1111/1365-2664.13985.

Question Topic - Terrestrial Protected Sites Target

Do you agree or disagree with the level of ambition proposed for the Marine Protected Area target?

Disagree

[If disagree] What reasons can you provide for why the government should consider a different level of ambition?

First, ZSL would like to express that it is disappointed that a terrestrial protected sites target has been omitted at this time.

There is a need for not only an expansion of protected areas across land and aquatic habitats, but ensuring these sites (both existing and planned for) are maintained to a high standard, effectively resourced and funded. At present only 38% of SSSIs in England are in favourable condition. Although it is a positive step to see these proposed targets, ZSL feels that these targets should both be scaled up in scope and given far stronger funding for effective enforcement.

Wildlife recovery requires not just protected areas on paper, but also in practice, with strong evidence showing that effective networks of high quality protected spaces is the vital factor in enabling wildlife recovery, in particular for threatened species. The vital nature of these sites as an enabler of such recovery means that the lack of a strong terrestrial target is highly concerning. It also means that Sites of Special Scientific Interest, Special Areas of Conservation and Special Protection Areas all need to be properly invested in, prioritised, and equipped to be in favourable conditions for wildlife recovery and restoration along with carbon drawdown.

On MPA's, ZSL would also make the point that an effective and strong "ecologically coherent network" of MPA's should as standard have strong management and monitoring in place. At present we do not believe that the current MPA's live up to this claim.

Question Topic - Target proposals to improve water quality and availability

Do you agree or disagree with the level of ambition proposed for an abandoned metal mines target?

Disagree

[If disagree] What reasons can you provide for why the government should consider a different level of ambition?

The targets proposed are indeed a positive step. However, despite the fact that meeting these targets should enable improvements in pollution from these specific sources, the target still permits for the overall health of our rivers, lakes, estuaries and coasts continues to decline. There is a need for the addition of agricultural water pollution targets alongside sewer overflow targets for water companies/utilities.

When compared to Europe, we have some of the worst water quality across river networks, which has a detrimental effect both wildlife and human health.

The Water Framework Directive (England and Wales) Regulations 2017 does have improvement targets currently in place. However, after this expires in 2027 there will be no overall water target in place. As such, there is a need for an overall target for water quality, rather than simply the 4 targets that have been proposed.

Question Topic - Target proposals for woodland cover

Do you agree or disagree with our proposed level of ambition for a tree and woodland cover target?

Disagree

What reasons can you provide for why the government should consider a different level of ambition?

ZSL's supports the aim of creating a long-term legally binding target to scale up tree cover in England. However, we would advise that the tree canopy coverage target be measured in a manner that respects the ecological differences between woodlands established for conservation and that intended for timber production – as the two have very different impacts on biodiversity. At present the language of the target only considers the quantity of the tree cover, not the quality of its biodiversity benefits and long-term sustainability.

We would encourage the target to be amended towards a prioritisation of tree cover in non-commercial settings to ensure the creation of not just tree cover but diverse, sustainable, and resilient woodland and forest environments that enable wider biodiversity growth rather than low diversity forestry plantations.

Finally, with research from the Woodland Trust showing that only 7% of our native woodland is in good condition (State of the UK's Woods and Trees Report, 2021), there is a need to focus not only on the planting of new woodland, but the effective management of existing woodlands to prevent additional degradation, and to scale up woodland recovery and restoration. The increase of tree canopy is vital, but the quality, longevity and health of the trees is just as important as the percentage of coverage gained under the targets.