

Saving Earth's biodiversity will rely on conservation, space agencies' collaboration

Global biodiversity loss is intensifying. But it is hard to assess progress towards the Aichi Biodiversity Targets for 2011–20 set by the Convention on Biological Diversity (CBD). Target 5, for instance, aims to halve global deforestation rates by 2020; but reliable indicators for deforestation that can be monitored remotely have not been developed or agreed on. National biodiversity monitoring programmes differ widely, most data sets are inconsistent, and few data are shared openly.

Satellite remote sensing is crucial to getting long-term global coverage. It can rapidly reveal where to reverse the loss of biological diversity on a wide range of scales in a consistent, borderless and repeatable manner. Quantities such as vegetation productivity or leaf cover can be measured across continents from space. But there is no agreement on how to translate these measurements into metrics that are relevant for biodiversity monitoring.

We call on conservation and space agencies to agree on a definitive set of biodiversity variables and how these will be tracked from space, to address conservation targets. Methods to derive these variables and the set of satellites needed to observe them must also be decided, to ensure continuous monitoring. To stimulate discussion, we propose ten variables that capture biodiversity change on the ground and can be monitored from space (see '[Tracking biodiversity](#)'). These range from leaf nitrogen and chlorophyll content to seasonal changes in floods and fires.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [Environmental science: Agree on biodiversity metrics to track from space](#)