A fifth of all plants threatened as habitats shrink worldwide



Destroyed by a shrimp farm Cyril Ruoso/Minden Pictures

By Gareth Willmen

Plant habitats are changing - often shrinking - globally and more than 20 per cent of plant species are now at risk of extinction worldwide.

That's according to the first global assessment of the state of the world's plants by London's Royal Botanic Gardens, Kew.

 $The team used IUCN \ data \ to estimate the number of threatened plant species, and worked out the change in land cover by looking at satellite images taken between 2001 \ and 2012.$

 $Mangroves \ saw \ the \ greatest \ change, with \ more \ than \ a \ quarter \ of \ their \ area \ transformed \ over \ the \ decade-often \ to \ shrimp \ farms \ and \ golf \ courses.$

New mangroves also grew in areas that didn't have them before, so the net loss is not as large, but the trend is for loss of habitat.

This was followed by tropical and subtropical coniferous forests, which saw a change of almost 25 per cent, also mainly loss. All other biome types, apart from desert and very dry shrubland, saw changes of more than 10 per cent.

Climate impact?

While human activity was the main driver of these changes, climate change is also having a large impact – though the exact scale of climate impact is still unclear, says Kathy Willis, Kew's director of science.

"We really need to stop and think what we're doing about land planning on a global scale," says Willis. However, she adds, there is a big "black hole" in plant research in some parts of the world, such as countries in Africa.

On the flip side, says Willis, more than 2000 plant species are being discovered each year. An estimated 391,000 vascular plants are now known to science, says the report.

More than 80 scientists were involved in the report, which took more than a year to produce and also covered issues such as global food security and invasive species. Kew hopes it will help fill knowledge gaps, aiding global collaboration on plant conservation.

Willis was surprised when starting the research that nothing like this existed for plants, even though there were global assessments for many other organisms. Although much of the data isn't totally new, she says, pulling it all together is.