Ambitious conservation action sees a brighter future for mangroves and seagrass

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Ambitious restoration of mangroves and seagrasses could lead to substantial recovery of these ecosystems New research has found.

Published in Current Biology, the study estimated potential recovery of mangroves and seagrass under a range of protection and restoration strategies for 2030, 2050 and 2070, milestone years for international biodiversity commitments, and beyond.

"Protection alone is unlikely to drive sufficient recovery," said Dr. Christina Buelow from the Global Wetlands Project and the Griffith University Coastal and Marine Research Centre.

"Our research suggests that if ambitious action is taken to both protect and restore, gains of up to 5% for mangroves and 35% for seagrasses could be achieved by 2050.

"There is an urgent need to halt and reverse loss of mangroves and seagrass to continue to benefit from the services these ecosystems provide to coastal communities, such as enhancing coastal resilience and contributing to climate stability."

Conservation action is needed to maintain and recover mangrove and seagrass ecosystems worldwide, but until now the expected outcomes of different protection and restoration strategies has remained unclear.

"Pairing global observations of mangrove and seagrass coverage change through time with modeled changes we demonstrated that only protection and restoration combined can support substantial gains in coverage of these ecosystems into the future," said Professor Rod Connolly, director of the Coastal and Marine Research Centre and the Global Wetlands Project.

"Our research can be used to set global conservation targets for coastal ecosystem recovery that are not only scientifically-sound, but are also have the necessary ambition required to inspire coordinated international action," he said.

Associate Professor Chris Brown, also from The Global Wetlands Project and the Coastal and Marine Research Centre, added that "we need to be really ambitious if we are going to fight climate change and save coastal ecosystems."

"Imagine if we put the kind of effort we are putting into space programs into protecting the Earth's ecosystems—that's what I mean by being ambitious.

"We need to save Earth's ecosystems from the unprecedented scale of human pressures they face and help secure the stable climate that humanity needs to thrive.

"Our research provides the scientific basis to predict the outcomes we can expect for these ecosystems if they are ambitious. We hope this helps motivate action towards international targets for ecosystem protection, such as the UN Sustainable Development Goals and the Post-2020
Global Biodiversity Framework, which envisions a future where humans live in harmony with nature.


Provided by Griffith University

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