# [***New Findings in Climate Change Described from Deakin University (Remote Sensing for Cost-effective Blue Carbon Accounting)***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:67YH-M4M1-JBSP-12YX-00000-00&context=1516831)

Climate Change Daily News

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**Section:** CLIMATE CHANGE

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**Body**

2023 APR 07 (NewsRx) -- By a News Reporter-Staff News Editor at Climate Change Daily News -- Data detailed on Climate Change have been presented. According to news reporting out of Burwood, Australia, by NewsRx editors, research stated, "***Blue carbon*** ecosystems (BCE) include ***mangrove*** forests, tidal marshes, and seagrass meadows, all of which are currently under threat, putting their contribution to mitigating climate change at risk. Although certain chal-lenges and trade-offs exist, remote sensing offers a promising avenue for transparent, replicable, and cost-effective accounting of many BCE at unprecedented temporal and spatial scales."

Funders for this research include Australian Research Council, Alfred Deakin Fellowship scheme, Australian Research Council, I + D + i Projects, PIE HOLOCENO, European Commission, Michael E. Tennenbaum Secretarial Scholar, ICoAST program with collaborative funding from the University of Western Australia, Commonwealth Scientific & Industrial Research Organisation (CSIRO), Australian Institute of Marine Science and Western Australian Department of Fisheries, ***Blue Carbon*** Capability Development Funding grant from the Australian Institute of Marine Science.

Our news journalists obtained a quote from the research from Deakin University, "The United Nations Frame-work Convention on Climate Change (UNFCCC) has issued guidelines for developing ***blue carbon*** inventories to incorporate into Nationally Determined Contributions (NDCs). Yet, there is little guidance on remote sensing techniques for monitoring, reporting, and verifying ***blue carbon*** assets. This review constructs a unified roadmap for applying remote sensing technologies to develop cost-effective carbon inventories for BCE - from local to global scales. We summarise and discuss (1) current standard guidelines for ***blue carbon*** inventories; (2) tradi-tional and cutting-edge remote sensing technologies for mapping ***blue carbon*** habitats; (3) methods for trans-lating habitat maps into carbon estimates; and (4) a decision tree to assist users in determining the most suitable approach depending on their areas of interest, budget, and required accuracy of ***blue carbon*** assessment. We designed this work to support UNFCCC-approved IPCC guidelines with specific recommendations on remote sensing techniques for GHG inventories. Overall, remote sensing technologies are robust and cost-effective tools for monitoring, reporting, and verifying ***blue carbon*** assets and projects."

According to the news editors, the research concluded: "Increased appreciation of these tech-niques can promote a technological shift towards greater policy and industry uptake, enhancing the scalability of ***blue carbon*** as a Natural Climate Solution worldwide."

This research has been peer-reviewed.

For more information on this research see: Remote Sensing for Cost-effective ***Blue Carbon*** Accounting. Earth-Science Reviews, 2023;238. Earth-Science Reviews can be contacted at: Elsevier, Radarweg 29, 1043 Nx Amsterdam, Netherlands. (Elsevier - www.elsevier.com; Earth-Science Reviews - www.journals.elsevier.com/earth-science-reviews/)

Our news journalists report that additional information may be obtained by contacting Martino E. Malerba, Deakin University, Centre for Integrative Ecology, School of Life and Environmental Sciences, Burwood Campus, Burwood, Vic 3125, Australia. Additional authors for this research include Micheli Duarte de Paula Costa, Peter Macreadie, Daniel A. Friess, Lukas Schuster, Mary A. Young, Daniel Ierodiaconou, David Lagomasino, Oscar Serrano, Sharyn M. Hickey and Ben Radford.

The direct object identifier (DOI) for that additional information is: https://doi.org/10.1016/j.earscirev.2023.104337. This DOI is a link to an online electronic document that is either free or for purchase, and can be your direct source for a journal article and its citation.

Keywords for this news article include: Burwood, Australia, Australia and New Zealand, Climate Change, Global Warming, Remote Sensing, Technology, Deakin University.

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