

People prefer 'natural' strategies to reduce atmospheric carbon

May 26 2021, by Tom Fleischman



Credit: Pixabay/CC0 Public Domain

Soil carbon storage, carbon capture and storage, biochar—mention these terms to most people, and a blank stare might be the response.

But frame these [climate](#) change mitigation strategies as being clean and green approaches to reversing the dangerous warming of our planet, and people might be more inclined to at least listen—and even to back these efforts.

A cross-disciplinary collaboration led by Jonathon Schuldt, associate professor of communication at Cornell University, found that a majority of the U.S. public is supportive of soil [carbon storage](#) as a climate change mitigation strategy, particularly when that and similar approaches are seen as "natural" strategies.

"To me, that psychology part—that's really interesting," Schuldt said. "What would lead people, especially if they're unfamiliar with these different strategies, to support one more than the other? Our study and others suggest that a big part of it is whether people see it as natural."

The group's paper, "Perceptions of Naturalness Predict U.S. Public Support for Soil Carbon Storage as a Climate Solution," published May 26 in the journal *Climatic Change*. Co-authors include Johannes Lehmann, the Liberty Hyde Bailey Professor in the School of Integrative Plant Science (SIPS), Soil and Crop Sciences Section (CALs); Dominic Woolf, senior research associate in SIPS; Shannan Sweet, postdoctoral associate in the Lehmann Lab; and Deborah Bossio of the Nature Conservancy.

Schuldt's team analyzed results from a survey of 1,222 U.S. adults who reported believing in climate change at least "somewhat," to estimate [public support](#) for soil carbon storage and how it compares to other leading carbon dioxide removal strategies.

Mitigation strategies—solar and [wind power](#), electric vehicles and sustainable land use and biodiversity, to name a few—are already capturing much attention as the world grapples with rising temperatures,

melting ice caps and increasingly violent weather events.

Survey data came from an online poll conducted Sept. 19 to Oct. 4, 2019, by NORC at the University of Chicago, a leading survey research firm. The team solicited respondents' perceptions of naturalness and policy support for five CO₂ removal strategies: afforestation and reforestation; bioenergy plus [carbon capture](#) and storage; direct air capture; soil carbon storage; and soil carbon storage with biochar. Each respondent viewed a randomized group of three options and was asked to estimate the likelihood that they'd support that strategy.

They were also asked to rate their level of agreement with each of five statements related to humans' tampering with nature.

In the final analysis, perceived naturalness was a strong indicator of support for soil carbon storage as a climate change mitigation strategy. Of the five CO₂ removal strategies, support was highest (73%) for afforestation and reforestation; [soil](#) carbon storage ranked second, supported by 62% of those polled.

And in this politically divided time, Schuldt said, support for [soil carbon storage](#) crossed the aisle. A total of 72% who identified as Democrats supported the [strategy](#); among Republicans, 52% were in support.

"We expected, and found, that Democrats support all kinds of climate strategies more than Republicans do," Schuldt said. "But the error I think we sometimes make is that we categorize all Democrats as being for it, and all Republicans as being against it. That's not true."

Ultimately, Schuldt said, the goal is to allow policymakers to present the public with palatable options for addressing climate change.

"There is a whole range of solutions out there," he said. "Then the

question politically becomes, where do you start? Which one has the most buy-in? I think our data help speak to that."

More information: Shannan K. Sweet et al, Perceptions of naturalness predict US public support for Soil Carbon Storage as a climate solution, *Climatic Change* (2021). [DOI: 10.1007/s10584-021-03121-0](https://doi.org/10.1007/s10584-021-03121-0)

Provided by Cornell University

Citation: People prefer 'natural' strategies to reduce atmospheric carbon (2021, May 26) retrieved 26 June 2024 from <https://phys.org/news/2021-05-people-natural-strategies-atmospheric-carbon.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.