



MINDSET

REGENERATION & RESILIENCE SYMPOSIUM

A person wearing a blue cap and a light purple long-sleeved shirt is crouching in a vineyard, harvesting grapes. They are holding a white plastic bucket. The vineyard has rows of grapevines with green and yellowing leaves. The background is slightly blurred, showing more of the vineyard and a hint of a building in the distance.

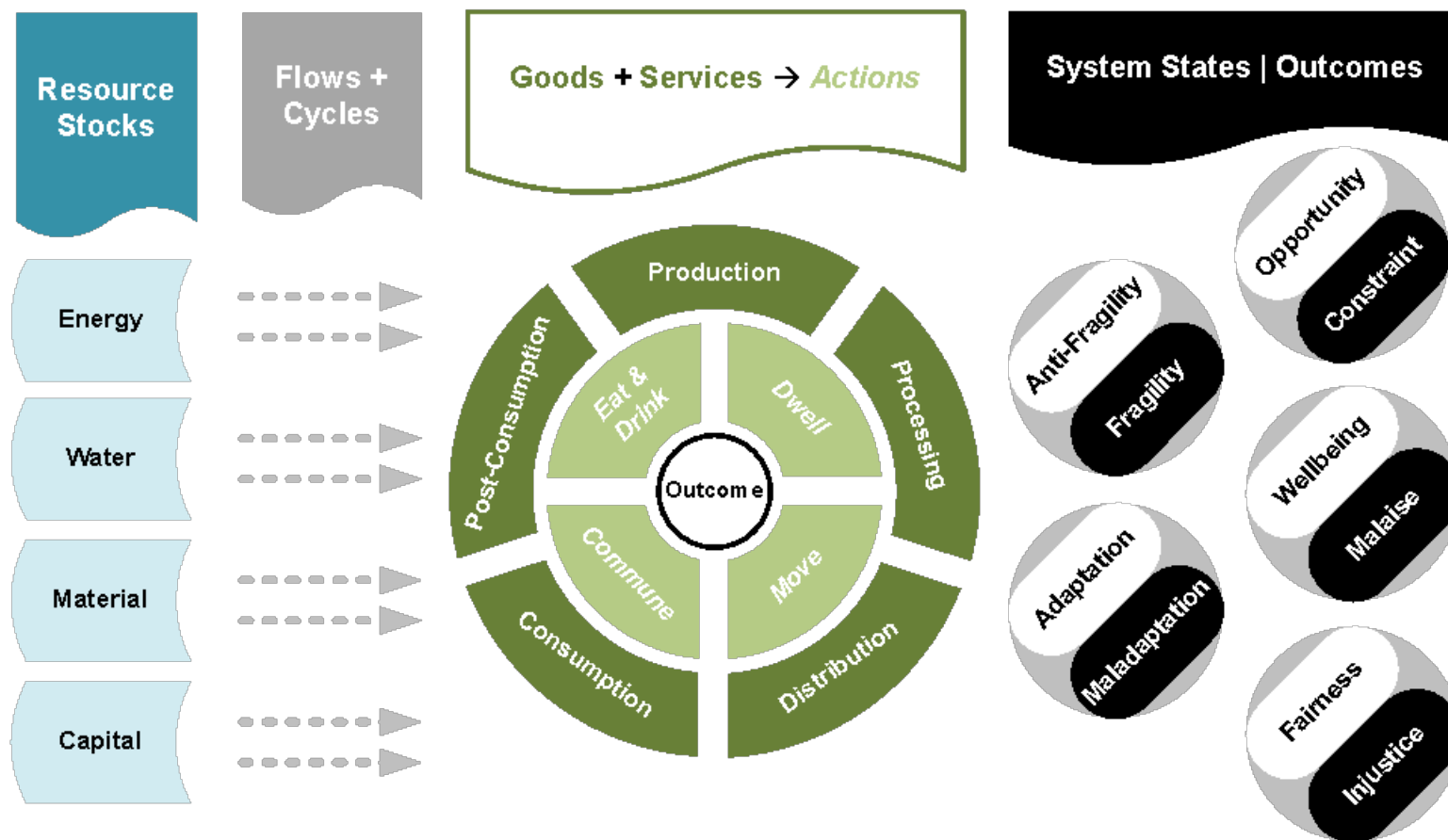
Think of all of the billions of breaths simultaneously being inhaled and exhaled around the planet right now. Some first breaths and some final breaths. And all of the trees and plants ‘breathing’ in and out, enabling our existence. This is the most basic, fundamental truth of our interconnectedness.



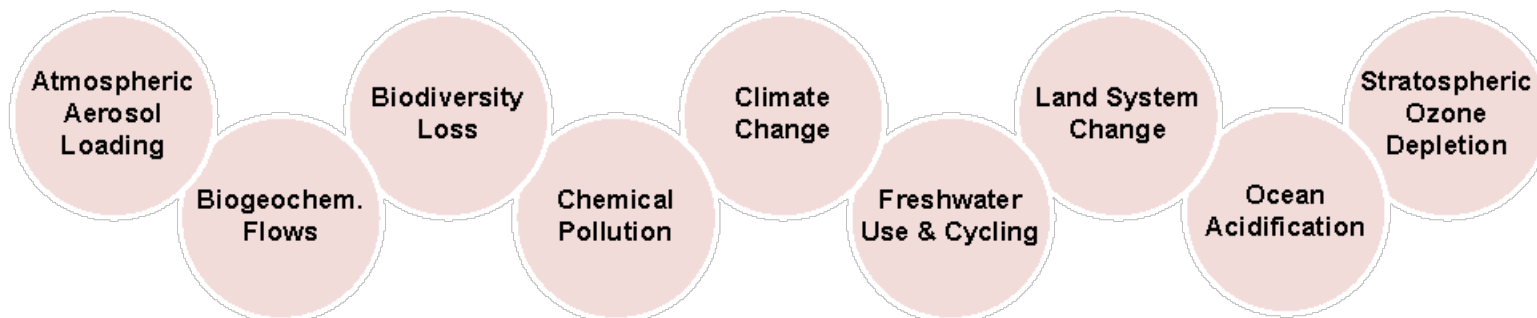
Go all the way with it. Do not back
off. For once, go all the goddamn
way with what matters.

Ernest Hemingway





9 Planetary Boundaries
Change | Exchange





**Water Efficiency
& Savings**



**Energy Efficiency
& Savings**



**Waste Prevention &
Supply Chain**

**SIX PILLARS OF SUSTAINABLE
WINEGROWING LEADERSHIP**



**Proactive Farming, Soil
Health & Biodiversity**



**Social Justice,
Diversity & Inclusion**



**Climate Action &
Regenerative Ag**

SAMPLE OF RISE RESULTS

- ★ CREATION OF WATERSHED RESTORATION COLLECTIVE
-AND- ZERO WASTE COLLECTIVE
- ★ NO-TILL PILOT BY DOMINUS
- ★ TRANSITION BY PINE RIDGE TO DRY FARMING
- ★ MATERRA | CUNAT'S ACTIVE TRANSITION TO ORGANIC
- ★ SPOTTSWOODE'S EV CHARGER REBATES
- ★ QUIKSA LIGHTENING BOTTLE WEIGHT
- ★ BLUEBERRY UV TANK SANITATION AT OPUS ONE
- ★ T...S USE OF LOW-EMISSIONS KILN TO CREATE BIOCHAR
- ★ ...G IMPLEMENTATION GRANTS FOR OVER \$35,000
- ★ ...ORDAN'S COMMITMENT TO MORE CLIMATE COVERAGE



Farming for Life

Renaturing the food we eat,
and the wine we drink

“You really have to have the heart ethos. It feels better in the vineyard; healthier for me, for the team, for the vines. I would never go back.” —Jan Matthias-Klein, Staffelter-Hof

SIX PRINCIPLES OF SOIL HEALTH

CONTEXT-SPECIFIC
LIMIT DISTURBANCE (INCLUDING CHEMICAL)
ARMOR THE SOIL
LIVING ROOTS
BUILD BIODIVERSITY
INTEGRATE ANIMALS



Five Ecosystem Processes

Solar-Energy Function

Maximizing the capture of solar energy by fixing as many plant sugars, via photosynthesis, as possible

The Water Cycle

Focused on maximization of water infiltration, storage, and recycling in the soil

Soil Mineral/Nutrient Cycle

Inculcating biologically alive and healthy soils that contain and recycle a rich lode of diverse minerals & nutrients

Dynamic Ecosystems

Maximizing biodiversity and health of integrated ecosystems, at all levels

Human-Social Ecosystem

Cultivating human agency triggering landscape regeneration by working in harmony with natural systems

“A crucial point is that all functions are dynamically intertwined and indivisibly connected via reciprocal causal links.”

-Charles Massy
Call of the Reed Warbler



Heat Dome, June 2021, 5 p.m.



Uncovered soils,
Fenceline neighbor,
Elevation 338'
150°F

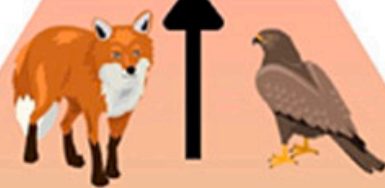


Covered soils
Hope Well,
Elevation 350'
89°F

Concentration of
contaminants



Top predators



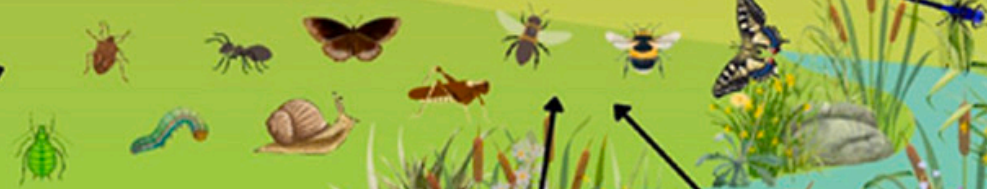
Predators (insectivores)

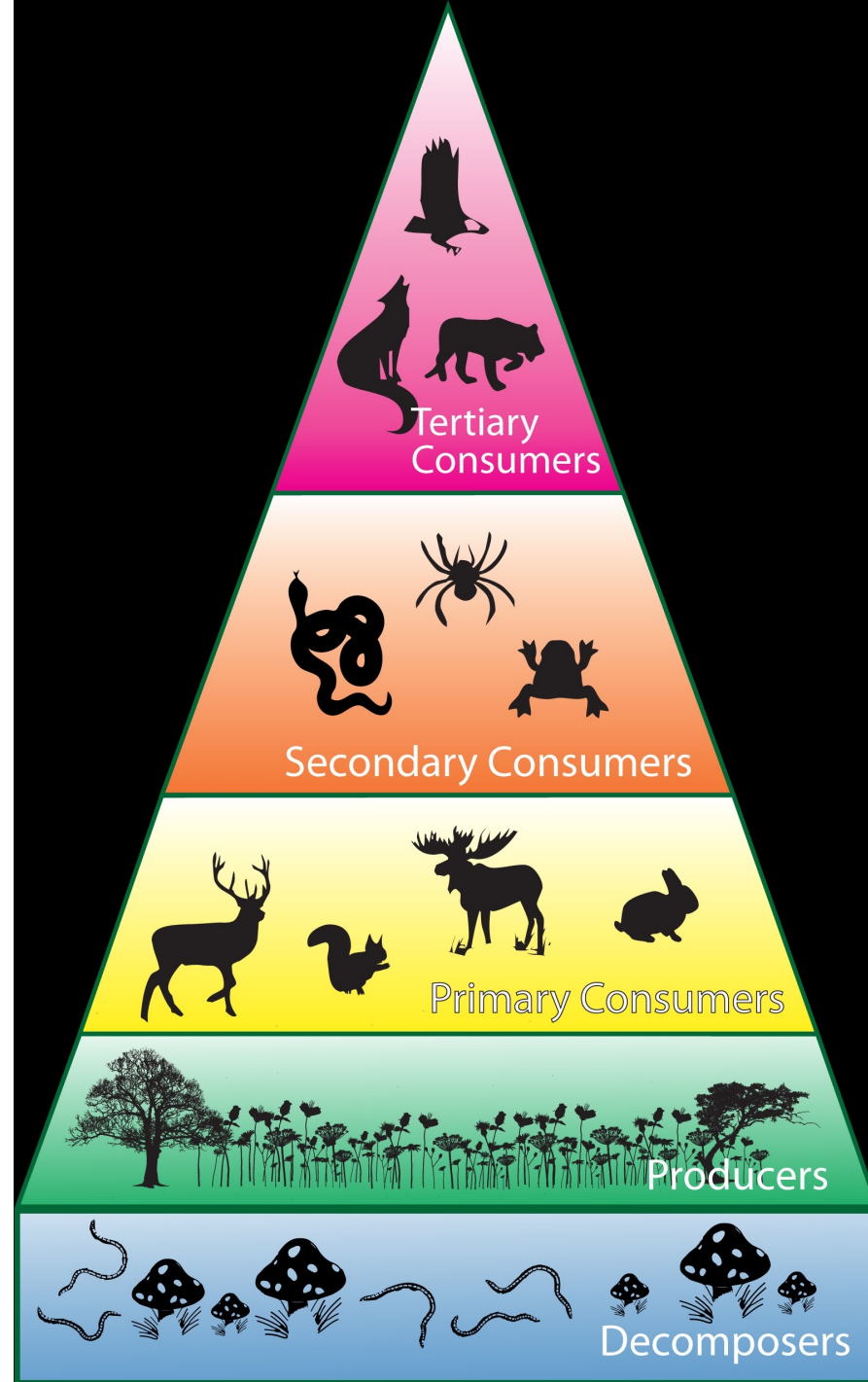


Secondary consumers (insectivores) and omnivorous predators



Primary consumers (herbivores, pollinators)





Soil health and nutrient density: preliminary comparison of regenerative and conventional farming

David R. Montgomery, Anne Biklé, Ray Archuleta, Paul Brown, Jazmin Jordan

Published January 27, 2022

Regeneratively grown crops had:

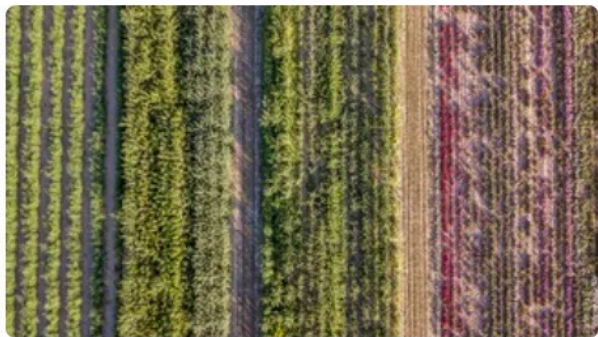
- 34% more vitamin K
- 15% more vitamin E
- 17% more vitamin B2
- 11% more calcium
- 17-23% more zinc
- 15% more total carotenoids
- 20% more total phenolics
- 22% more total phytosterols

Agriculture is the ONE sector that has the ability to transform from a net emitter of CO₂ to a net sequesterer of CO₂ — there is no other human managed realm with this potential.

Carbon Cycle Institute



Published in



Frontiers in Sustainable
Food Systems
Agroecology and
Ecosystem Services

3.1 impact factor

6.2 citescore

> Editor & Reviewers

ORIGINAL RESEARCH article

Front. Sustain. Food Syst., 30 January 2024

Sec. Agroecology and Ecosystem Services

Volume 7 - 2023 | <https://doi.org/10.3389/fsufs.2023.1234108>

Quantifying soil carbon sequestration from regenerative agricultural practices in crops and vineyards



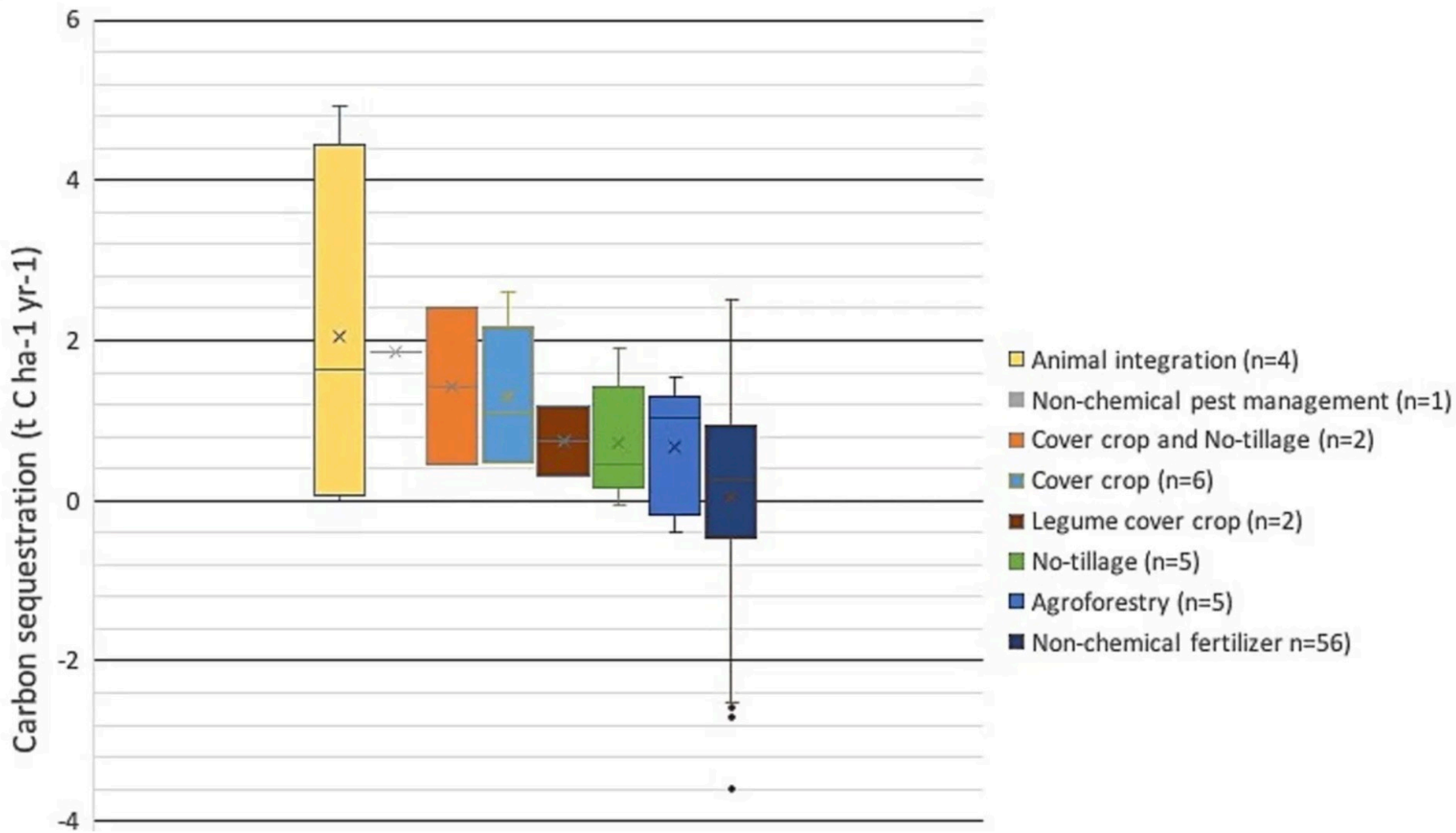
Jessica Villat ¹



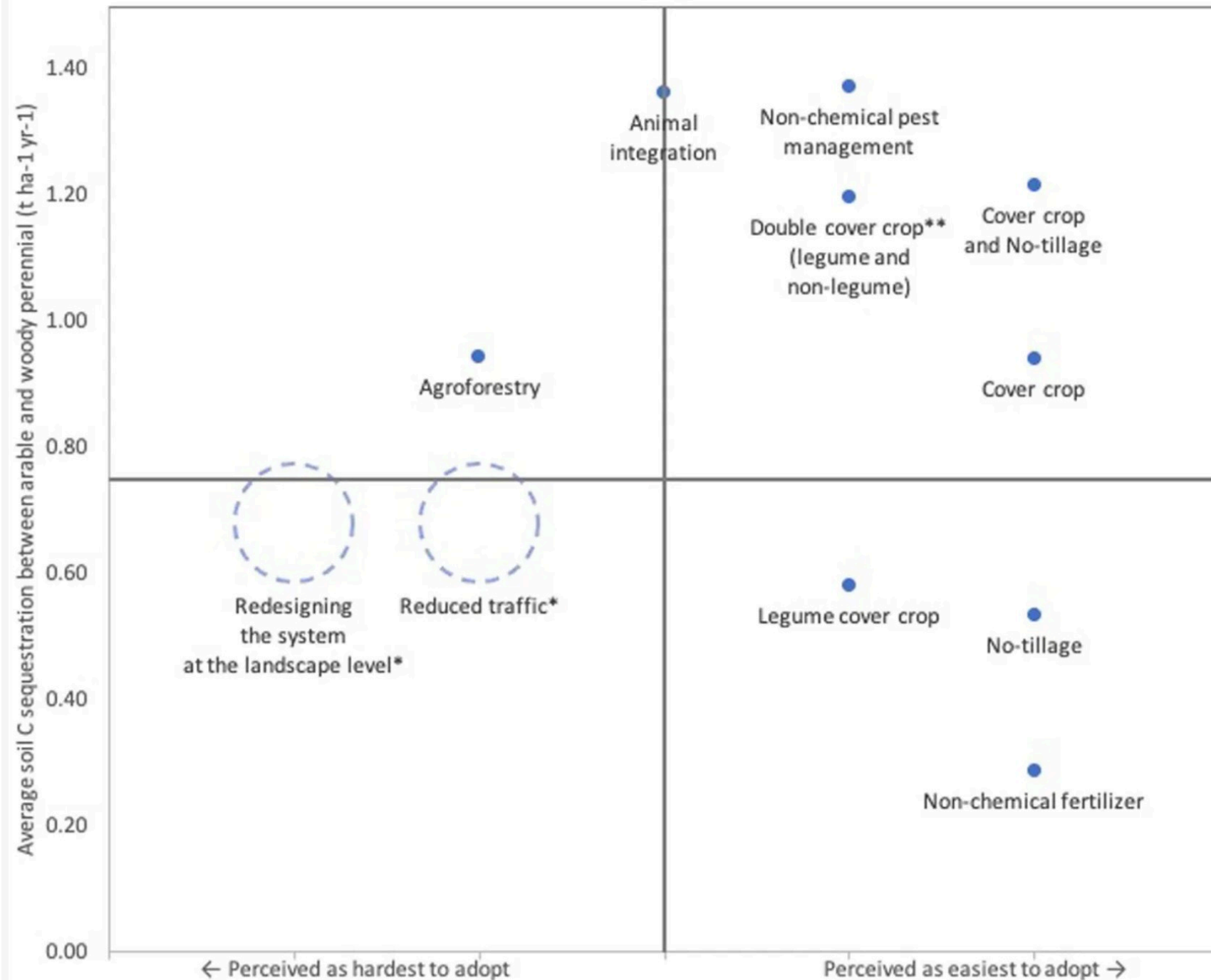
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Below-ground C sequestration rates for regenerative practices on woody perennial land. Boxplots represent the 25th–75th percentile of data, the “x” represents the mean, and horizontal lines represent the median. Each dot represents averages calculated in one independent study, with the total number of studies for each practice shown in the legend. Positive values represent a below-ground carbon sink, while negative values represent C emissions.



Regenerative Practices, Their Ease of Adoption and C Sequestration. The ease of adoption is based on an analysis of 20 interviews with winegrowers in Switzerland ([Villat, 2021](#)). *No C sequestration figures were available for redesigning the system at the landscape level and reduced traffic, so to include them, we positioned them randomly at the halfway C sequestration point. **The C sequestration figure for the use of a double cover crop is only for arable land use, and unknown for woody perennials.

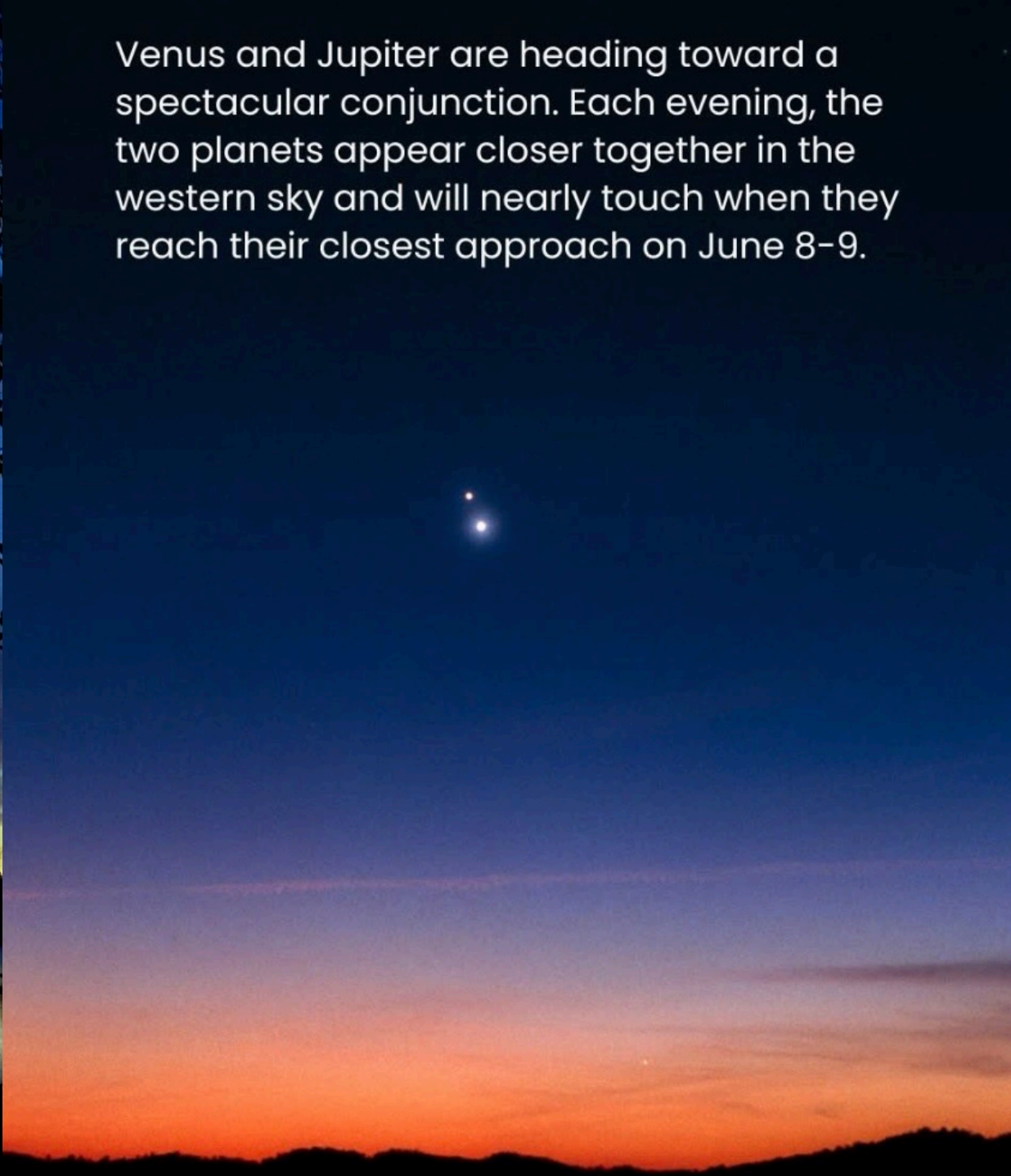




WINE, WATER & WEEDS

Global Leaders in Regenerative Viticulture
and Systems Share Their Stories & Insights

Venus and Jupiter are heading toward a spectacular conjunction. Each evening, the two planets appear closer together in the western sky and will nearly touch when they reach their closest approach on June 8-9.



Perception
equals projection

“Until one’s understanding
and perception changes, and
therefore one’s mind changes,
we can be blind to what is
all around us.”

-Charles Massy
Call of the Reed Warbler

A black and white photograph of a child painting a wooden barrel in a cellar. The child is standing on a barrel, using a brush to paint a design. There are several other barrels in the background, some with bungs. The scene is dimly lit, with the light source coming from the left, creating a strong contrast.

It's easy to be a critic,
but being a doer
requires effort, risk
& **CHANGE.**

Wayne Dyer

“It is hard to learn
if you already know.”

Professor Amy Edmondson
Harvard Business School



Cambria

