

Climate Friday Town Hall

The Power and Potential of Regenerative Ranching.

-Wendy Millet, TomKat Ranch



Regenerative Agriculture can provide ~18% of total GHG extraction we need by 2050.

Cattle: ~47 GT CO2e

9- Silvopasture 31.19 GT

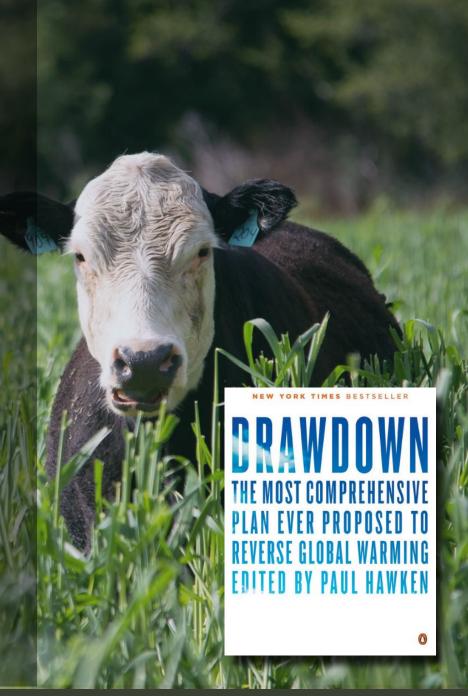
19- Managed grazing 16.34 GT

Crops: ~52 GT CO2e

11- Regenerative Ag 23.15 GT

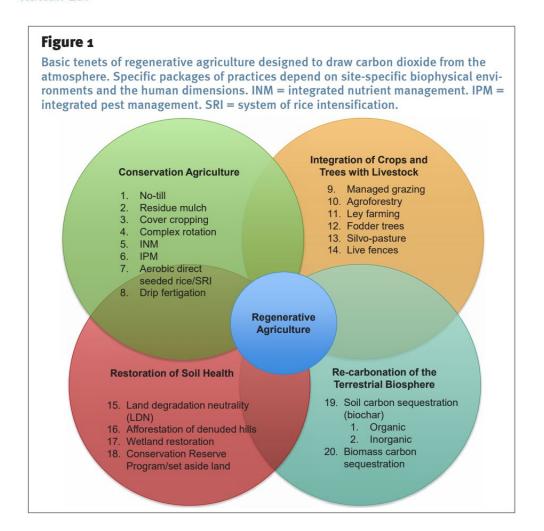
16- Conservation Ag 17.35 GT

24- Improved Rice Cultivation 11.34 GT

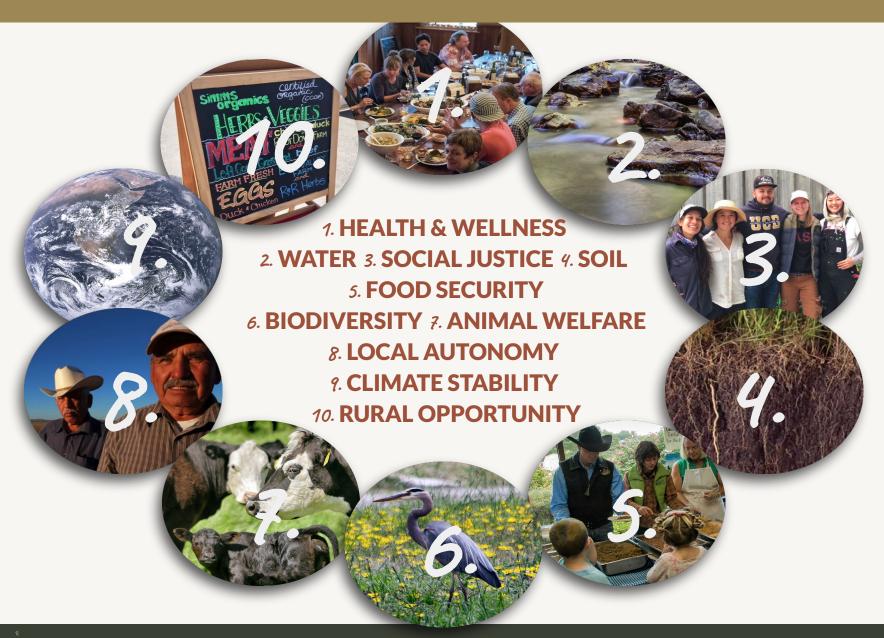


Regenerative agriculture for food and climate

Rattan Lal



REGENERATIVE AGRICULTURE: MORE THAN JUST CARBON



ALIVE RANCHING

INCORPORATES GRAZING ANIMALS INTO ECOSYSTEM PROCESSES WHICH...



Cow dung

Annual grasses have shallow roots

> Roots continue to grow as plants are effectively grazed

Perennial grasses have deep roots that allow water to move deep into the soils and produce more food for microbes and fungi

ACTIVE CARBON

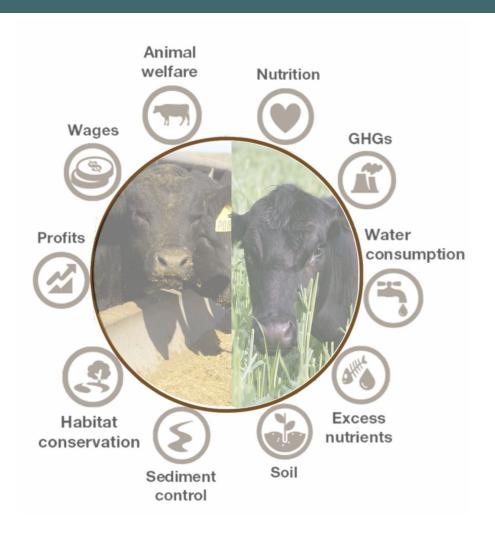
Builds microbial communities

SUPPORTS HEALTHY WILDLIFE HABITAT, BUILDS SOIL CARBON, STIMULATES THE MICROBIAL LIFECYCLE, AND INCREASES SOIL WATER-HOLDING CAPACITY

PASSIVE CARBON

THE TRUE COST OF BEEF. VALUING THE WHOLE SYSTEM

-\$3.03 / lb
INDUSTRIAL
BEEF
(Negative Impact)



+\$6.97 / lb
REGENERATIVE
BEEF
(Positive Impact)

For more details and supporting documents regarding this analysis, see

https://tomkatranch.org/2018/08/06/accessing-the-total-impact-of-tomkat-ranch-research-and-methodologies/.

REGENERATIVE BOTTOM LINE. GROWING NET PROFIT.

KNOWN BENEFITS

INCREASES INCOME

- Reduce Labor Time
- Reduce/Eliminate External Feed Costs
- Reduce Land Management and Upkeep Costs
- Increase Resilience to
 Extreme Conditions and
 Weather



Increase Stocking Rate
Access Premium Prices
Create New Enterprises
Increase Health and Value
of Land
Improve Livestock Health
and Performance
Win Desirable Leases,
Grants, and Incentives

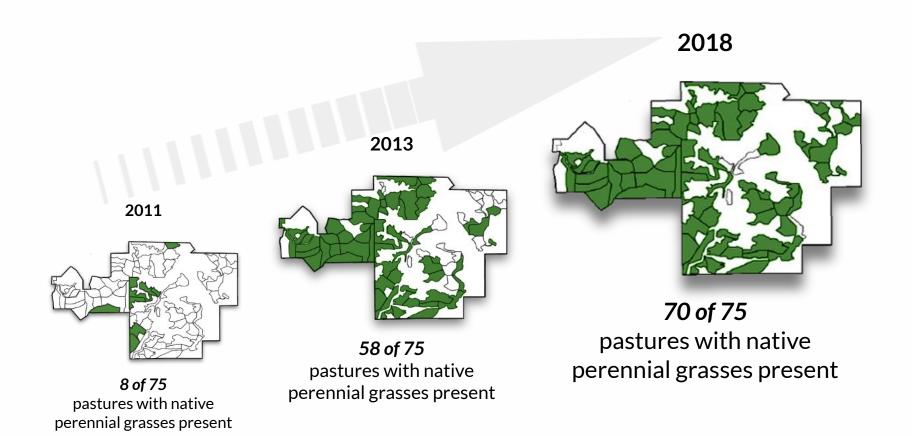
REDUCES COSTS

These, and many other, economic benefits have been observed and documented in the Profiles in Land and Management Series at www.RegenerativeRanching.org

INSPIRING A RURAL RENAISSANCE

REGENERATIVE MODEL OLD MODEL Regeneration **Healthy Food and Ecosystem** Extraction Commodities Services **Concentrating Opportunity Creating Opportunity Market-Driven** Values-Driven Labor/Capital **Knowledge/Wisdom** Insular **Open and Diverse** * Nature as Opponent Nature as Ally **Focused on Single Generation Inclusive and Multi-Generational Urban Dwellers as Owners or Urban Dwellers as Customers and Adversaries Investors** Government as Regulator/ **Government as Supporter and** Subsidizer Technical Assistance Provider **Brittle** Resilient





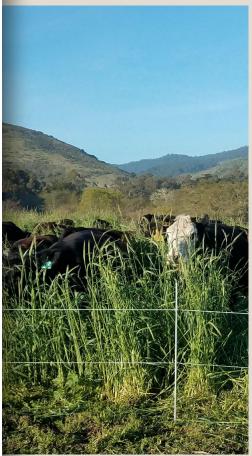


Presence of Native Perennial Grasses on TomKat Ranch after Implementing Planned Livestock Grazing*



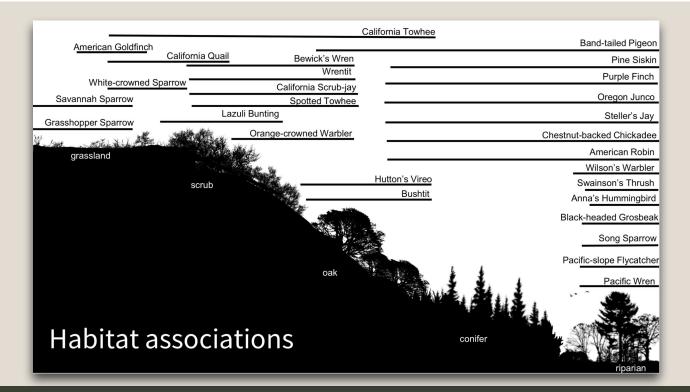
^{*} Henneman, Carlene & Seavy, Nathaniel E. & Gardali, Thomas. "Restoring Native Perennial Grasses by Changing Grazing Practices in Central Coastal California." Ecological Restoration, vol. 32 no. 4, 2014, pp. 352-354.



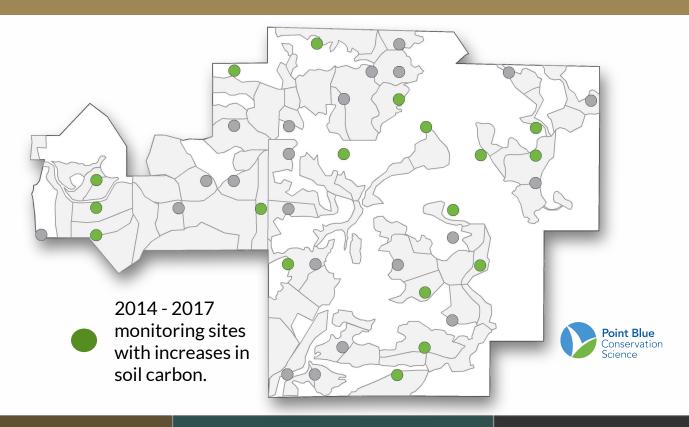




- **♦** TomKat Ranch is home to over 100 migratory and year-round bird species.
- Some species, such as Swainson's Thrush and Song Sparrow, have increased on the ranch despite an observed decline across Coastal California.







*	67% of points meet or exceed
	NRCS goals.
*	Between 2015-18, bulk densit

SOIL COMPACTION

Between 2015-18, bulk density on the ranch improved on average.

WATER INFILTRATION

- 36 monitoring sites infiltrate at 5 minutes or faster per inch of precipitation.
- Ranch average infiltration is 9.8" per hour. A 100-year storm in SF is 1.32" per hour.

SOIL CARBON

- Average soil carbon on ranch 4%.
- During intense drought 46% of monitoring sites still gained soil carbon at 0-10 cm, 10-40 cm, or both.

A VISION FOR THE FUTURE.

REGENERATIVE RANCHING



Demonstrate the practices and benefits of regenerative rangeland management and support the tools that speed its adoption.

FORK TO FARM



Influence the way society eats in order to accelerate adoption of regenerative agriculture.

GATHERING FOR ACTION



Bring people together for meaningful conversations and collaborations that catalyze the transition to a regenerative agriculture system.

POTENTIAL. WHY RANGELANDS?

