

A photograph of a farm scene. In the foreground, there are several cows, mostly black and white, grazing in a field of tall green grass. In the background, there is a dense line of green trees under a clear blue sky with a few light clouds. The overall scene is bright and natural.

What does stewardship mean to you?

*Asking Vermont farmers to describe their relationship
with their land*

Katie Michels

Presentation to the American Farmland Trust Soil Health Conference

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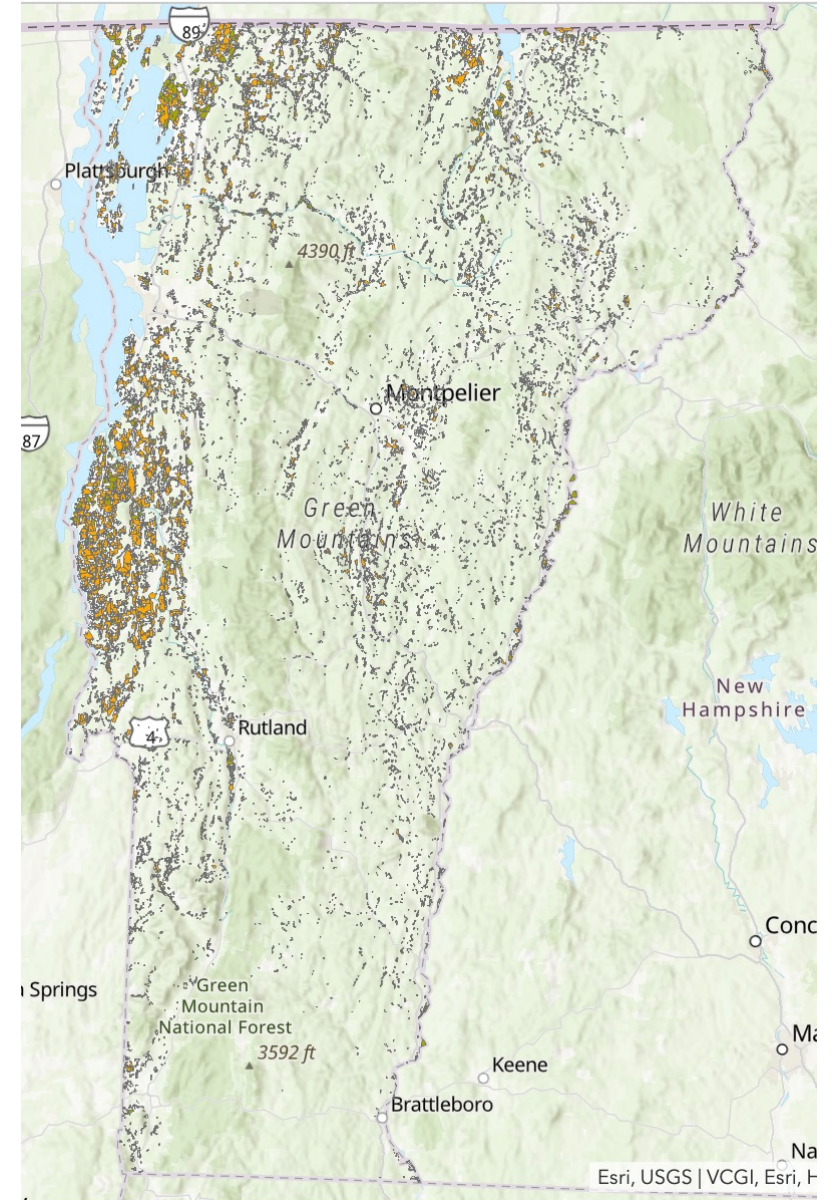


Research Question

How do Vermont farmers describe their relationship with their land? How do they define responsible land stewardship?

Context

- 1.3 of the state's 6.2 million acres are farmland
- 94% of Vermont is farm or forestland
- Dairy comprises 80% of agricultural economy



Motivations

“Farmers are the people who know the most about their land in Vermont, but they are under siege. We must find new ways to make visible the wisdom carried by farmers - other ways of knowing and relating to the land that farmers carry.”



VERMONT DAIRY FARMER VOICES
Interviews with dairy farmers and advocates

Motivations

“Environmental leaders need time on the farm, to live in farmers’ shoes. They are focused on science, but they need to understand the realities of farming. How can farmers give them a realistic experience on the farm? It’s easier to blame ‘the other’ - or blame what we don’t know.”



VERMONT DAIRY FARMER VOICES
Interviews with dairy farmers and advocates

Shared personal reflections on the need to broaden the scope of conservation social science

Katie Moon^{1,2}  | Vanessa M. Adams³ | Benjamin Cooke⁴

"We focus on the value that comes from understanding that social science is not just answers, but *stories*; not just data, but *meaning*; and that *place* is a critical part of understanding socio-ecological phenomena and processes."

What did I do?

- Interviews, visits with 28 livestock farmers in Vermont
- Survey in partnership with American Farmland Trust, UVM, UConn



Why do you farm?

Why do you farm?

- Farmers offered the following reasons:

- Stewardship or improvement of farmland (i.e. farming positively impacts th...
- Love of animals (i.e. wanting to spend time with animals; wanting to be su...
- To be able to live in accordance with my values
- To be able to have a positive relationship with nature
- Independence (i.e. ability to make my own living, be my own boss)
- Climate change mitigation
- Benefiting my community: feeding and contributing to my community and neig...
- Feeding the world (i.e. feeding people beyond my nearby community)
- Financial (livelihood, farm viability, economics, long-term cost savings)
- Quality of life (Enjoyment of work, lifestyle)
- Stewardship or improvement of the environment off your farm (ie. farming p...
- Other (please specify):
- Legacy (i.e. continuing my family's legacy, setting up a lasting legacy for...

Why do you farm?

- Farmers also shared powerful stories about why they farm...

Why do you farm?

“Why do we farm? Because we just both love it. And it’s what we always wanted to do.”

Why do you farm?



BREAD



“I think the decision to farm was that I didn't have to apologize for my lifestyle ... that it was defensible.”

What do you manage your land for?

- Ecological outcomes – biodiversity - birds, bugs; deer; maple trees...
 - *“I feel like a lot of our decisions on the farm go hand in hand with how we tend to manage grazing anyway. That seems to be the most beneficial for the soil.”*
- Soil chemistry and soil health outcomes
- Animal health – Animal welfare and well-being
- Community outcomes
 - *“I think farming produces great communities. You have people who have flexible schedules ... Fairfield really has benefitted by having a strong farming community, in terms of the institutions, the schools, community center, library, municipal government, fire department, ... there is community capacity to support those institutions.”*
 - *“I want to be sure that more than just college professors can purchase my food.”*
- Economic outcomes – feed quality, quality of product

What do you manage your land for, and **how do you know if you're being successful?**

- Farmers use different types of data to answer this question:
 - Observational data
 - Data from being embedded in landscape – walking in fields, seeing regrowth rates, seeing changes each day in response to actions

What do you manage your land for, and **how do you know if you're being successful?**

- Ecological outcomes – biodiversity - birds, bugs; deer; maple trees...
 - *“I feel like a lot of our decisions on the farm go hand in hand with how we tend to manage grazing anyway. That seems to be the most beneficial for the soil.”*
 - *“I try to keep track of the different trophic levels of species that we see. We have a pretty complete system. You know, we have snakes, we have amphibians, we have reptiles, we have, you know, small mammals and larger mammals.”*
 - *“I don't feel like I track biodiversity in any kind of informed way. Other than observation. I just say, you know, am I seeing different kinds of insects? Am I hearing and seeing different kinds of birds?”*
- Soil chemistry and soil health outcomes
 - *“I'm doing soil tests periodically. But my biggest indicator, every single day, is to just watch and see where we're grazing, how the cows are doing, and what these plant species look like.”*
 - Presence or absence of different species
 - Soil tests – carbon, infiltration, other metrics
- Animal health – Animal welfare and well-being
 - What are the animals eating? Do they seem content?
- Community outcomes
 - Number and diversity of farms operating in my community
 - Who is buying food?
- Economic outcomes – feed quality, quality of product
 - Milk checks, components

What enables or constrains your ability to farm in the ways that you want to?

- Time
- Labor
- Infrastructure, equipment
- Efficiencies (or lack thereof) in on-farm systems
- The way that land was laid out
- Policies – rules or guidelines for federal funding
- Broader societal values

What does land stewardship mean to you?

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*“Leaving the land better
and more productive than
when we got here.”*

What does land stewardship mean to you?

“We focus on grazing with as gentle of an impact on the land as we can. That is our biggest, most powerful tool. The way we graze protects water in the soil and soil temperature.”

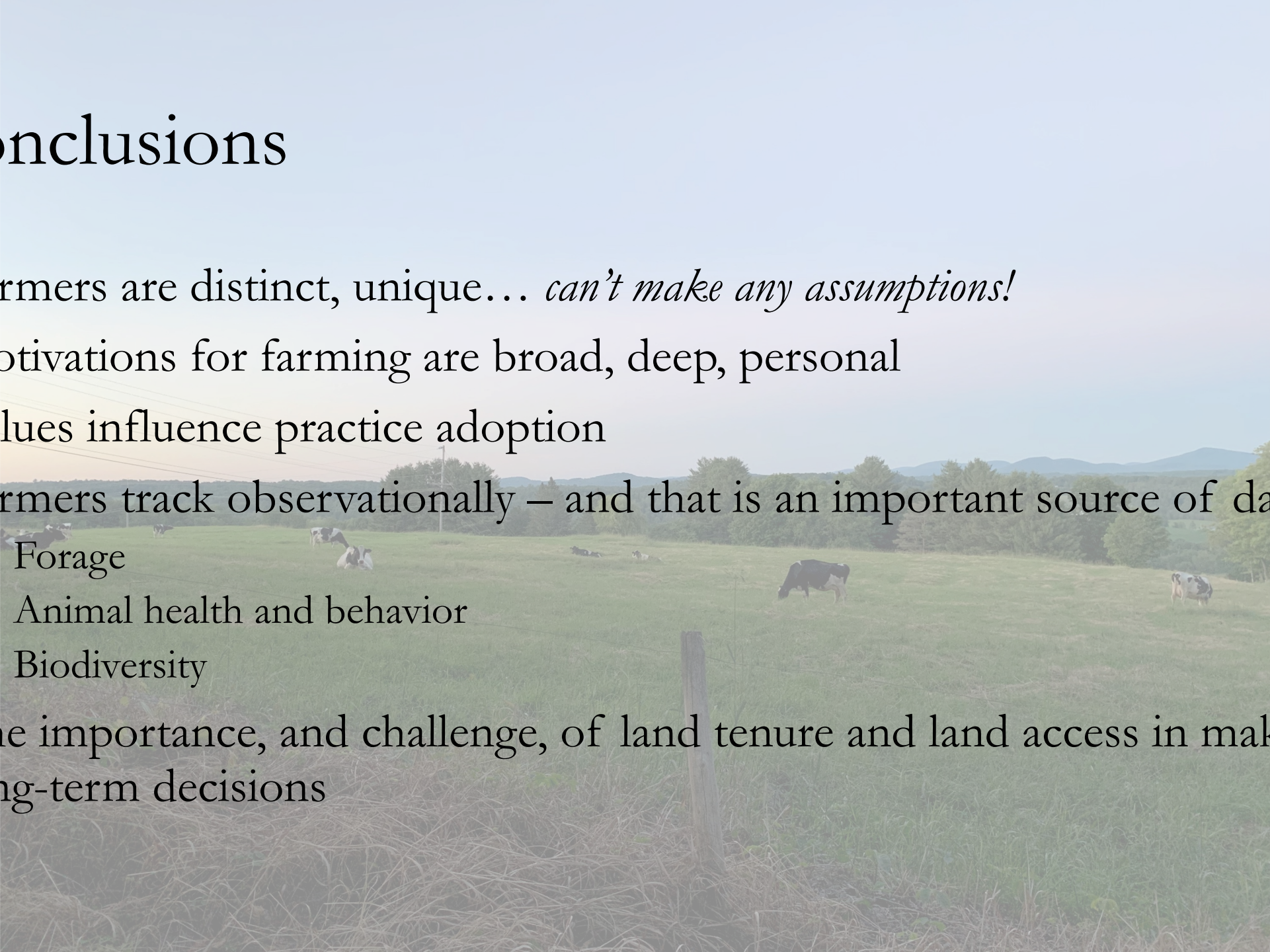


What does land stewardship mean to you?

“I don't really think about the future all that much. Really, I try to mostly think about the past ... to do right by those who have come before and shaped the place and try to proceed in a way that might make them smile ... I ask each day how I can be of greatest service. To really listen to that question means you don't make a lot of plans.”

Conclusions

- Farmers are distinct, unique... *can't make any assumptions!*
- Motivations for farming are broad, deep, personal
- Values influence practice adoption
- Farmers track observationally – and that is an important source of data!
 - Forage
 - Animal health and behavior
 - Biodiversity
- The importance, and challenge, of land tenure and land access in making long-term decisions



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