



Competencies and Attributes Farmers Need for Successful Farmer-Led Watershed Conservation Efforts

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The success of agricultural watershed management rests on engaged and empowered farmers. Without their leadership, it will be impossible to accomplish conservation practice adoption at the scale necessary to achieve water quality goals.

Benning et al. (2019) defined farmer leadership in watershed-scale conservation as when farmers contribute to a conservation initiative and extend their impact beyond their operations. The authors identified three forms of farmer leadership:

- **Peer leadership** is when farmers are willing to engage their peers, including recruiting other farmers to participate in activities, demonstrating conservation practices on their own farms, providing testimonials, and mentoring other farmers.
- **Consultation** is when a farmer serves as an advisor for an organization, group, or project. This requires more community engagement.
- **Decision-making** is when a farmer has a more formal leadership role, such as in a watershed organization, and helps to define goals, strategies, and resource distribution.

As many Extension and conservation professionals can attest to, recruiting and developing farmer leadership is not easy. It can be difficult to find farmers who are willing to become involved at any level, let alone in leadership roles, even if they are passionate about conservation. Existing groups of engaged farmers often eventually experience what happens to many volunteer-led efforts: burn out. Also, many farmers may not have formal leadership training, even if they bring leadership potential to the table. Limited leadership skills can weaken the effectiveness and sustainability of a farmer-led effort.

But how do you know if a farmer has leadership potential, and what skills do they need to be effective leaders in conservation? This study helps answer these questions.

The purpose of this study was to help broaden understanding of what farmer leadership in conservation means and to support the establishment or expansion of farmer-led conservation efforts. We focused specifically on peer leadership. Not only has research identified farmer-to-farmer communication as an important way farmers seek and receive conservation-related information (e.g., Ranjan et al., 2019; Rust et al., 2022), but peer leadership also has low commitment requirements and, thus, could be an easy way for farmers to be involved.

To develop the following lists of leadership attributes and competencies, we examined existing leadership theory to identify relevant concepts. We then conducted focus groups with engaged farmers and conservation professionals who coordinate farmer-led conservation efforts to validate the most relevant concepts and uncover emergent ideas. Our findings lay groundwork for the development of recruitment and training programs to grow and sustain farmer-led conservation efforts.

A Caveat: Farmer’s May Shy Away from the Term ‘Leader’

We found through this research that many farmers don’t think of themselves as leaders. This may have something to do with one of the leadership attributes we identified — humility. When conducting outreach to recruit potential farmer leaders, Extension and conservation professionals may want to avoid using the term. Instead, they should talk about how farmers can become more involved or engaged in their communities, or simply have productive conversations with their neighbors.

Key Attributes of Farmer Leadership in Conservation

While attributes are typically understood as a person’s innate qualities and personality traits, they can be strengthened through training. Understanding leadership attributes can help in the identification of potential farmer leaders.

Attribute	Definition
Commitment	A willingness to lead and sense of self-efficacy in one’s ability to do so.
Credibility	Provides and seeks accurate information and is perceived as trustworthy by others.
Experimental Mindset	An openness and drive to experiment, try new things, and seek new information to improve the conservation outcomes and bottom line of one’s operation.
Humility	A capacity to recognize, accept, share, and learn from one’s own weaknesses, mistakes, and failures.
Integrity	Demonstrates favorable behavior and values that build trust and respect with peers.
Stewardship/ Conservation Ethic	A values-based drive to improve and preserve soil and water resources.
Vision	The capacity to see a big-picture and long-term view of agriculture and its role in soil and water conservation — and to rally other farmers behind that vision.

Core Competencies of Farmer Leadership in Conservation

Core competencies are essential knowledge and skills farmers can acquire on their own or receive training in to be effective conservation leaders. Identifying competencies can guide the development of training curricula and other capacity-building opportunities. There are three competency categories — subject matter literacy, communication skills, and social capital — and each have three associated competencies.

Competency Category	Competency	Definition
Subject Matter Literacy	Conservation Literacy	Knowledge of and experience with conservation practices and systems, and their agronomic and economic benefits.
	Watershed Literacy	A basic understanding of local water resources issues in a watershed.
	Systems Literacy	A basic understanding of the components and relationships that exist within the agroecosystems, watersheds, and sociocultural environments in which one lives and farms.
Communication Skills	Storytelling	A willingness to share one's story and the ability to tell it in a way that motivates other farmers.
	Persuasion	The ability to communicate the need and efficacy of conservation practices in a manner that influences the attitude or behavior of another farmer.
	Listening	The capacity and commitment to hear others' needs, concerns, and experiences.
Social Capital	Relationship Building	The capacity to develop new relationships and sustain existing relationships with farmers, conservation professionals, and other agricultural leaders.
	Boundary Spanning	The ability to build relationships with individuals and organizations outside of one's own social group.
	Civic Capacity	The willingness to get involved with formal and informal civic organizations to identify and address community needs.

Implications for Extension and Conservation Professionals

This work serves Extension and conservation professionals who are seeking to increase and enhance farmer involvement in watershed-based conservation initiatives, such as forming or expanding farmer-led conservation networks. The attributes described above give guidance for identifying farmers who could have leadership potential, especially as peer leaders. The core competencies can inform the development and delivery of training or other skill-building opportunities to build farmers' leadership confidence and capacities. While it's likely no farmer will possess all of the attributes nor be strong in all of the competencies, Extension and conservation professionals can match farmers to roles that suit their strengths and help them improve weaker skills to increase their effectiveness.

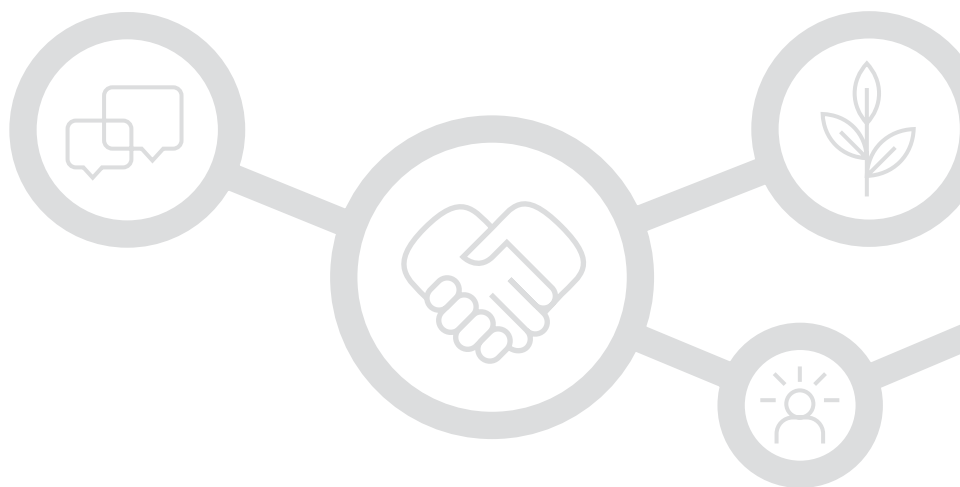
Providing training to potential and existing farmer leaders could help increase participation in farmer-led conservation efforts and help sustain momentum in the long run. Expanding and sustaining participation by farmers will be critical to mainstreaming conservation practices on agricultural land to achieve watershed management goals.

Ready to build farmer leadership?

A curriculum called [Skills for Building Farmer Networks for Conservation](#) was developed based on this research. It builds farmers' confidence and capacities in most of the competencies, so they can be successful in engaging their peers about conservation practices — from neighborly conversations to formal leadership positions.

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