Learning from Landowners: Examining the Role of Peer Exchange in Private Landowner Outreach through Landowner Networks

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More than one-third of forested land in the United States is owned by individuals or families, making these lands a significant source of the nation’s forest resources and services. Yet investments in traditional expert-led outreach efforts, including financial incentive programs and technical assistance for management plan development, have failed to engage the vast majority of U.S. forest landowners. Through case studies of five diverse landowner networks, this study explored peer exchange among landowners as an alternative means of fostering engagement. Sixty-one in-depth interviews revealed common themes across cases that contributed to landowner participation and learning, including maintaining an atmosphere conducive to social learning, emphasis on local information and hands-on learning, and access to rich networks that include both practical peer-derived information and trusted technical expert-derived information. These findings enrich existing landowner engagement theory by offering insight into landowner networks as an avenue for serving an ever-growing population of family forest owners.

Keywords Australia, case study, family forest owners, Landcare, master volunteer, peer exchange, peer-to-peer learning, United States, woodland owner cooperative

In the United States, about 35% of the forest land is owned by more than 10 million nonindustrial private landowners, also called “family forest” owners (Butler 2008). The public value derived from informed, active management of family forests points to the need for landowner assistance and education (Cubbage et al. 1996). However, decades of investments in landowner outreach efforts—primarily management plan development, landowner education, property tax incentives, and cost-sharing programs—have engaged only a small percentage of landowners. According to the

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U.S. National Woodland Owner Survey, only 15% of family forest owners nationwide had sought any type of management advice in the previous five years, and only 4% had a written management plan (Butler 2008). Engaging a larger proportion of landowners through direct assistance may be cost-prohibitive (Kilgore et al. 2008), and is further complicated by declining public funding. Yet, the increasing suite of challenges posed by climate change, invasive species, water quality protection, and related stressors make landowner assistance as high of a priority as ever.

Approaches to engaging landowners that are grounded in adult learning theory may offer efficient and effective opportunities to increase the return on public investments targeting private lands (Gootee et al. 2010). One example is the development of peer networks that foster and support self-guided learning on an as-needed basis. Numerous examples exist, including Extension master volunteer programs, forest landowner cooperatives, and landowner associations. The presence of trusted interpersonal relationships affects landowner acceptance of management information and advice; for many, this trust is found among peer groups rather than expert sources (Gootee et al. 2010).

Peer-to-peer learning is frequently employed in higher education (Havnes 2008) and is defined as a “two-way reciprocal learning activity’ [that] refers to networks of learning relationships, among students and significant others” (Boud and Lee 2005, 503). Rickenbach (2009) notes that in the landowner community, this method of learning differs from traditional teacher-to-student educational approaches in that “knowledge is primarily shared among landowners as opposed to being derived from natural resource professionals” (593). Peer-to-peer learning can thus be understood as the exchange of ideas and information among landowners and family, friends, neighbors, and other landowners, which is contrasted with the largely one-way delivery of content through expert-centric education models commonly employed in landowner outreach. For this reason, we use the term peer exchange to describe this process of peers learning from and teaching one another.

Many studies indicate that forest landowners commonly turn to peers, and sometimes to both peers and experts, to exchange knowledge and information (e.g., Hujala and Tikkanen 2008; Knoot and Rickenbach 2011; Schraml 2003). However, while formal and informal landowner networks are common (e.g., Schraml 2003), questions remain about intentional network development as a landowner outreach strategy. According to Rickenbach (2009), the “emergence of local landowner associations and peer-to-peer learning requires research methods that better capture the social nature of these new directions” (593). This study sought to elucidate outcomes of landowner participation in peer networks in terms of access to trusted, relevant information concerning land management, thus exploring (a) how and to what degree peer exchange was fostered within these networks, (b) how these networks influenced landowners and contributed to information flow within the landowner community, and (c) how the findings may inform future landowner assistance programs.

**Theoretical Background**

Peer exchange may facilitate dissemination of information into the landowner community beyond traditional expert delivery approaches (Fletcher and Reed 1996; Catanzaro 2008). Adult learning theory suggests that many adults prefer learning opportunities that allow them to use personal experience and are disinclined to
utilize hierarchical settings with experts (Gootee et al. 2010; Knowles 1990). They also prefer a learning environment that is “informal, comfortable, flexible, [and] non-threatening” (Knowles 1990, 54), qualities more typical of a peer environment. Preference for independent observation of peers over expert-driven learning can also be seen in diffusion of innovations, as described by Rogers (1995):

Most individuals evaluate an innovation, not on the basis of scientific research by experts, but through the subjective evaluations of near-peers who have adopted the innovation. These near-peers thus serve as role models, whose innovative behavior tends to be imitated by others in their system. (36)

Furthermore, Rogers (1995) suggests that peer observation is an important motivator for “late adopters” of innovations; thus, building peer networks may help to reach and influence previously unengaged landowners. Indeed, according to Allred et al. (2010), landowners who had been assisted by a New York Master Forest Owner peer volunteer reported seeking more information from professionals, developing management plans, and engaging in management activities such as thinnings and improving wildlife habitat.

Social learning, described by Muro and Jeffrey (2008) as “learning with each other” (332), can yield a variety of benefits, such as increased knowledge and technical skills, attitude change, trust, relationship-building, and behavior change (Muro and Jeffrey 2008), making it an important, and perhaps necessary, catalyst for natural resource management (Pahl-Wostl et al. 2007). In turn, catalysts of effective social learning include activities inherent to peer exchange-based landowner outreach—such as facilitation, small group work, participation, and diversity of knowledge sources (Muro and Jeffrey 2008). Additionally, access to knowledgeable peer networks is increasingly viewed as a form of social capital. According to Lin’s (2001) social network theory of social capital, individuals can access resources (capital) through the group with which they are affiliated, as well as from the broader network surrounding the group. Strong social networks within a community—that is, networks with a high density of connections and heterogeneity of knowledge—may also be related to community capacity for adaptive management (Bodin et al. 2006). Thus, through a combination of social learning and social capital, involvement with peer networks may help landowners to build relationships and the knowledge base necessary to implement their goals while laying the groundwork necessary for cross-boundary collaboration among landowners (Rickenbach et al. 2011).

Methodology

Unlike expert-driven adult learning models, peer exchange models are learner-driven (Catanzaro 2008). This study chose a diversity of landowner network organizational models reflecting varying levels of expert involvement in their approach: a master volunteer program (Extension staff), woodland owner cooperative (member-owned community initiative), and Landcare organizations in the United States and Australia (mixed professional staff and community-based initiative) (Table 1). Examining multiple Landcare cases allowed for comparison of the organization in its native Australian context to its more recent adoption in the United States. The
specific cases representing each model were chosen in part to reflect diversity of target landowner types (e.g., forest and nonforest owners) and geographic diversity. Five cases were chosen, three from the United States and two from Queensland, Australia (Table 2). Data were collected between August 2008 and July 2009.

Employing a qualitative case-study methodology (Yin 1989), 61 in-depth, semi-structured, face-to-face interviews were conducted with organizational leaders and members. Interviews were designed to gain a holistic view of the organizations, their structures, and how peer exchange was approached. Separate interview guides were used for leaders and members, with leader interviews focusing on background information and overarching perspectives on peer interaction within the group. Participants were selected purposively—incorporating a range of participation histories and roles—to provide a rich understanding of each case within a focused sample size. Interviews averaged approximately 1 hour each and were digitally recorded with participant consent. Supplementary notes and field observations provided illustration and support for emergent themes. Interviews were transcribed and thematically coded using deductively and inductively derived codes (Miles and Huberman 1994); that is, themes were identified a priori based upon the theory and literature cited, which informed the interview questions, as well as through emergence of themes from the interviews themselves. Coded material was synthesized into descriptive theme summaries for each case, with individual cases serving as the basic unit of analysis; leader and member data were combined in order to gain a holistic picture of each case based on multiple perspectives. These themes were then reanalyzed across multiple cases to compare and contrast approaches and identify stronger and weaker themes overall. For the sake of brevity, this article focuses on the most

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<tbody>
<tr>
<td>“Master Volunteer” Program</td>
<td>Training is provided to community members, who repay the service by providing informed, voluntary assistance to other community members (e.g., Wolford et al. 2001). The model has become popular in Extension forestry programs under names such as Master Forest Steward, Master Forest Owner, and Master Woodland Manager.</td>
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<tr>
<td>Woodland Owner Cooperative</td>
<td>Member-owned cooperatives can provide forestry services as well as a variety of opportunities for landowner interaction and networking with professionals. Woodland owner cooperatives empower and unite local landowner communities, thus encouraging greater participation in on-ground forest management (Blinn et al. 2007).</td>
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<tr>
<td>Landcare</td>
<td>Landcare emerged in the agricultural sector in Victoria, Australia, in the mid-1980s as a landowner-initiated response to increasing regional land degradation and the decline of the agricultural community. Through a combination of grassroots effort and government support and funding, Landcare has grown to more than 4,000 groups in Australia today. In recent years, it has spread to nations across the globe (Wilson 2004).</td>
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</tbody>
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### Table 2. Summary of case selection, cases 1–5, respectively

<table>
<thead>
<tr>
<th>Location</th>
<th>Scale</th>
<th>Target Community</th>
<th>Total Interviews</th>
<th>Description</th>
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<tbody>
<tr>
<td>Master Woodland Manager (MWM)</td>
<td>Oregon, USA</td>
<td>Statewide/regional</td>
<td>Forest landowners</td>
<td>14(3)°</td>
</tr>
<tr>
<td>Kickapoo Woods Cooperative (KWC)</td>
<td>Wisconsin, USA</td>
<td>Regional</td>
<td>Forest landowners</td>
<td>11(3)</td>
</tr>
<tr>
<td>Grayson Landcare (GLC)</td>
<td>Virginia, USA</td>
<td>Regional/local</td>
<td>Pastoral/forest/non-landowners</td>
<td>12(3)</td>
</tr>
</tbody>
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*° Indicates the number of years since the program was first offered.*

**Oregon State University’s MWM program provides family forest owners with 85 hours of free classroom and field training in exchange for equal time spent in volunteer outreach to other woodland owners. It was the first MWM program in the country, graduating its first class in 1989 and two to three classes every year since in various counties throughout the state.**

**Founded in 1999, the KWC assists members throughout the Kickapoo Valley in SW Wisconsin with forestry services including timber marketing and sales, and offers 10 to 12 workshops per year to area landowners.**

**Inspired by the Australian model, GLC formed in 2005 from a combination of community, university, and nonprofit efforts with the goal of preserving the agricultural landscape and enriching the local community. It is generally recognized as the flagship Landcare organization in the U.S. (Robertson et al. 2009).**

*(Continued)*
### Table 2. Continued

<table>
<thead>
<tr>
<th>Location</th>
<th>Scale</th>
<th>Target community</th>
<th>Total interviews</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dalrymple Landcare Committee (DLC)</td>
<td>Queensland, AUS–Dry Tropics</td>
<td>Regional/local</td>
<td>Pastoral landowners</td>
<td>12(3) The first pastoral Landcare group in Australia, DLC formed in 1988 as a response to concerns over severe land degradation that had resulted from the combination of recent droughts and overgrazing.</td>
</tr>
<tr>
<td>Trees for The Evelyn and Atherton Tablelands (TREAT)</td>
<td>Queensland, AUS–Wet Tropics</td>
<td>Local</td>
<td>Forest/pastoral/non-landowners</td>
<td>12(2) TREAT formed in 1982 as a community Landcare tree planting group focused on restoring local rainforest ecosystems lost in massive forest clearing operations of previous decades.</td>
</tr>
</tbody>
</table>

*Note.* For more detail on individual case selection, see Kueper (2010).

*a* Indicates number of participants interviewed as group leaders, out of the total.
salient and unifying themes across cases, which are discussed within the context of three overarching categories: group atmosphere, information flow, and peer exchange (Table 3).

Findings

Group Atmosphere

They’ve set up... an environment which will allow you to learn... and that to me is very, very important. [5-10]

Creation of an atmosphere that encouraged active participation and facilitated learning was a key commonality across cases. The social nature of the groups, strong leadership, and the perceived credibility of information played key roles in creating this open, comfortable atmosphere.

Some groups increased credibility by fostering landowning issue-awareness among the non-landowning public through education and outreach, thus giving voice to local landowners. For example, Dalrymple Landcare (DLC) raised urban public awareness about rural landowner issues and efforts to maintain their land.
Kickapoo Woods Cooperative (KWC) represented members through their relationships with logging contractors and in communications related to the state’s forest land tax program. This representation was valued by members. While some participants perceived a general mistrust among landowners of government and professionals, the organizations were reputed to be reliable and approachable. As an active KWC member and leader noted:

[Landowners think], “who do I trust to come into my beloved woods and harvest?” … Do you trust the forester who’s going to do it on a percentage basis? … the sawmill who comes and wants to make a bid on your land? Or are you going to trust a group of people that you’re a member of, that’s your board, your staff people in there, who are working for you? [2-5]\(^1\)

The groups fostered learning and development of social capital by providing a comfortable, social environment. There was a sense of solidarity through connection with “like-minded” individuals. As participants stated, “It’s always fun to share your interests with other interested folk” [1-3], and “We’re all in the same boat together” [4-11]. Participants appreciated the informal, nonhierarchal structure of group events, as seen especially in the Landcare cases:

You have a meeting, and afterwards maybe a barbeque or a couple beers … surprisingly enough, you’ll find you get a lot of good ideas when … the formalities are done, let’s just sit back and talk about it.
And you’d be surprised at how much people open up. [4-9]

These factors contributed to creating a safe space conducive to communication and learning, or as a Grayson Landcare (GLC) participant stated, “a forum to dream” [3-2]. Participants were inspired by the energy and ideas of others, expressing feelings of self-empowerment and motivation to act as a result of being part of the group.

Participants also valued the opportunity to “give back” through the organization by volunteering in the community or sharing information with other landowners. The benefit was two-way, as volunteering often produced learning opportunities. While not all of the groups had formal membership structures, they fostered a sense of ownership among members; some participants noted that this encouraged greater interest and involvement.

Groups also provided forums to meet new friends and catch up with neighbors. Members enjoyed these social opportunities, viewing them as an important reason to participate:

Last Friday … [a member] said she had so much to do at home, she thought, “Damn it, I’ll leave it all and go to TREAT [Trees for the Evelyn and Atherton Tablelands].” And you’ll find that that’s often an attitude too. [5-12]

The social relationships that formed within these groups provided subsequent opportunities for information exchange.

Participants also noted that group involvement allowed members to feel like part of a community or “team,” as opposed to facing their management challenges alone.
Involvement allowed members to share resources and learn together, providing support and building shared identity. Members at times united to help with projects on each others’ lands, such as through KWC’s “Work Parties,” DLC’s “Barter Days,” and TREAT’s tree plantings on member properties. This pooling of labor allowed for accomplishment of on-the-ground projects and further information exchange. Notably, KWC did not demonstrate strong themes of community, a finding corroborated by Rickenbach (2009). Beyond approximately monthly workshops that were open to members and nonmembers, KWC lacked a frequent meeting structure exclusively for members. Similarly, the perceived strength of the individual Master Woodland Manager (MWM) communities varied among participants after the regular training meetings ended.

Strong, committed group leaders played a key role in atmosphere formation, as well as overall group function. Leaders helped to facilitate discussion by encouraging members to share ideas, teach one other, or lead property tours. Participants often went directly to leaders with specific questions, who in turn could direct them to others as needed. Interviewed leaders were a mix of professionals and nonprofessionals; some had professional backgrounds or education combined with local, practical experience, giving them the ability to speak both the “government lingo” and the “producer-level lingo,” as one leader noted. Some interviewed members also displayed group leadership, such as through property demonstrations, leading committees, being innovative land managers, or simply through dedication to group involvement.

**Information Flow**

I had no idea how enormous a universe of information is out there. No idea. [1-8]

The second category of findings highlighted the type of information provided by the groups, the ways that this information influenced landowners, and the means by which the groups facilitated information flow among participants and beyond the organizations. One of the most valuable aspects of these groups observed through the interviews was the provided network of landowners, professionals, and other resources such as equipment, information about funding sources, and workshop opportunities. While participants valued knowledge gained during trainings and events, the ability to draw on new relationships to answer future questions was equally beneficial. Especially for newer landowners, knowing “who to call” within their interpersonal network increased confidence in their abilities to solve problems or to direct other landowners. As described by a MWM member:

We never feel uncomfortable anymore because we know where to direct the question…. Somebody’s gonna’ know the answer and there’s always…enough help around. [1-8]

Members had access to a variety of external resources as well, such as visiting speakers, universities, and other local researching bodies. Also, most participants were involved in at least one other local landowner or community group. These groups sometimes fed into one another, a dynamic that was especially important
for MWM as the program trained landowners who could then become involved in local organizations. One TREAT leader intentionally promoted intergroup relationships by pioneering a unifying group meeting for local revegetation organizations to encourage communication among these similarly interested parties.

Through these networks, information from the group diffused passively and actively into the broader landowner community, often by word of mouth. Conversations occurred both spontaneously and as a result of neighbors approaching members directly, either knowing of their group involvement or seeing successes on member properties. DLC and TREAT leaders noted that they depended on this passive diffusion to help them “break in” to more resistant communities. Some participants were more proactive in their outreach, sharing information through connections with other groups or networks and with those who were not group “joiners” by nature. For MWM, this active diffusion was the central goal of the program—to train landowners who could then share their knowledge with peers. Additionally, KWC, GLC, DLC, and TREAT hosted workshops, speakers, and field days that were openly advertised to the broader community, not just members. However, there were also barriers to information diffusion. The most frequently cited concern was an acute hesitation to be a “pushy neighbor”—most respondents were uncomfortable giving unsolicited advice, particularly given the perceived independent nature of many landowners.

Affiliation with the groups also provided participants with increased ecological understanding, knowledge about emerging issues, access to recent research, and generally increased awareness of conservation and management options. This helped to provide both new and longer term landowners with the knowledge and self-confidence to engage in management on their property and discuss issues with or provide advice to others.

Many participants expressed surprise at how much they learned, using words such as “eye-opener,” “enormous . . . universe of information,” and “wholeness to a vision” to describe the influence on their thought processes. As one DLC grazier stated:

Let’s put it this way, if you didn’t have anything to do with Landcare or whatever, you could sit down on these places and you could work on it for years, and you know you’re probably like an emu, you have . . . your head in the sand. [4-11]

Participants particularly valued certain types of information. Practical application and demonstration were employed in most of the cases, especially with MWM, KWC, and DLC, which had frequent field days and workshops. Participants enjoyed property visits and other field excursions as these “hands-on learning” opportunities provided concrete examples on the landscape and a chance to practice new techniques learned in the classroom. Next, participants appreciated the focus on local geography and the specific interests of the community, noting that local information was not always available from sources with a statewide focus. For example, TREAT was dedicated to helping members foster native, area-appropriate vegetation. Finally, because of this local focus and presence, members could benefit from personalized advice from the leaders, who were sometimes familiar with their property or willing to visit.
Role of Peer Exchange

Humans have the ability to think and reason and . . . gain knowledge, not just from somebody above them. And you know, together, combining your God-given talents, you can come up with answers. [3-3]

The findings demonstrated the role that peer knowledge played in the groups, how this knowledge was perceived by participants and exchanged within the groups, and how these perceptions and uses compared to those of professional knowledge. For example, one consistently expressed benefit of peer exchange was the opportunity it provided to learn about a variety of approaches and “adopt and adapt” them to one’s own situation. As landowners share many of the same problems and goals, participants noted that being able to discuss past successes and failures may reduce their own costly mistakes. As previously mentioned, participants valued real-life demonstrations; property visits provided the opportunity to, in a sense, see into the future—especially where other properties were similar in goals, size, and ecology. This provided motivation to be active managers in order to achieve the successes and avoid the problems observed on other properties.

Interestingly, none of the study groups stated internal (among members) peer exchange as an explicit goal. However, leaders consistently noted that peer exchange occurred organically; for example:

They learn from each other big time . . . we’ve never stated that as a goal.
But it certainly is something that happens. [*1-11]

Additionally, there were many opportunities for peer exchange built into the structure of the groups. For example, each case exhibited opportunities for members to host demonstration tours. Events and opportunities for member interaction—such as meetings, workshops, labor exchange parties, seminars, and volunteer opportunities—also provided spaces for peer exchange.

Interests and goals among peers were quite diverse within the organizations. For instance, some MWM and KWC participants were primarily focused on timber production, while others were more interested in aesthetics or wildlife. Even participants with similar goals had differing approaches: for example, while DLC members were all graziers, they used a variety of management techniques. Interestingly, while like-mindedness provided one draw of the organizations, participants across all cases viewed the eclectic mix of opinions and perspectives as a strength of their respective organizations. Differing perspectives were seen as interesting, brought new ideas, and provided more opportunities for on-ground action by drawing on a greater range of skills.

A wide range of management experience existed among members as well. Some self-described “rookies,” while inexperienced, brought fresh perspectives and were eager to learn and willing to innovate. Others had a wealth of knowledge and experience to bring to the group. These more experienced members played an integral role in the learning dynamic of the group, providing examples of well-managed properties, answering questions, and serving as liaisons between less experienced members and professionals:

Some of the members are very knowledgeable about the woods. Twice, three times as much as I am. So every time I go to a meeting, I just try to sit by a new one, so I can learn something. [2-1]
Despite these perceived benefits of peer exchange, participants generally did not actively seek out their peers with questions. Rather, participants were opportunistic in their acquisition of peer knowledge, either picking things up through spontaneous run-ins with neighbors or waiting for group meetings, field days, or other events. Opportunities for informal discussion within organized gatherings were frequently cited as chances to exchange information. These opportunities were especially valued in expert-run meetings and workshops, as they provided landowners time to digest and discuss what they had just heard:

I think peer learning happens...in the “meeting after the meeting.” People get outside, and they get a cup of tea or a beer and they talk about, you know, “Why did he say that, that’s a load of rubbish?” But then someone will: “Well now, but hang on, it might be right because of this.” I think that’s all a learning process. [*4-2]

For some participants, these informal spaces were more enjoyable than the meetings themselves:

The good part for me is break time when I get to go and talk to people...the social networking that happens off the agenda is the most valuable to me, and why I go. [2-9]

Participants perceived peer and professional knowledge differently. Peers were often cited as a good source for “practical” information—the experiential knowledge gleaned from years of lived, on-the-ground management. Peers could offer useful management tips for quotidian affairs with examples from their own experiences, providing tangible evidence for professional information. Professional resources, on the other hand, were viewed as being useful for “technical” information—matters such as research, legal guidance, financial advice, funding, and in some cases management advice and property inspection. Professional information was sought when participants had specific questions and desired direct answers, whereas peer information was more useful for sharing general ideas that arose during casual conversation. Peers could even be used to recommend trustworthy professional resources. At still other times, the appropriate source depended on the question; in TREAT, participants knew their network well enough to be able to identify the people best suited to answer particular questions, peer or professional. Professionals were affiliated with all five groups through a variety of roles, providing education, leadership, financial support, and technical services.

**Discussion**

Through the assets of credibility, comfortable group environment, and satisfaction of multiple landowner needs, the groups fostered an appealing atmosphere that was conducive to relationship-building and learning. Information flow was facilitated by abundant networking opportunities, which provided participants access to local knowledge and resources; in combination with opportunities for hands-on learning and skill development, all of this influenced participants in a variety of ways. For instance, group involvement facilitated the development/refinement and achievement of goals, increased participants’ knowledge and confidence as
landowners, and generally functioned to increase awareness of and involvement in the ideas, behaviors, and lifestyle related to land management. Further, group influence extended outside the networks, impacting the broader landowning community through member and leader connections and initiative, as well as community outreach. Finally, the results indicate peer exchange was a key product of the groups that was facilitated by diverse knowledge and experience among members. Participants noted a variety of benefits of peer knowledge, and the data elicited evidence on how peer knowledge was exchanged within the context of the groups. It was evident, however, that professional or “expert” knowledge worked in concert with this peer knowledge to satisfy participants’ information needs.

The five cases shared similarities in form regarding influences on participation and learning. For instance, each provided an alternative information source to traditional expert-driven outlets. For those with reservations about government or professional sources, the groups facilitated access to both expert and peer information that was perceived as trustworthy and unbiased. Participants viewed the groups as ongoing resources, differing from one-time experiences with professionals that some participants had in the past experienced. Further, participants across cases repeatedly expressed the value of access to like-minded individuals, indicating the presence of homophily within the groups. Rogers (1995) states that greater homophily between individuals leads to more effective communication, aiding in diffusion of an innovation. Indeed, participants valued being able to freely discuss management issues in a comfortable, friendly setting of other interested people without fear of stigmatization, confirming the learning-environment preferences indicated by adult learning theory (Knowles 1990). Participants also found this setting to be inspirational—a “forum to dream” where the collective energy and knowledge of the group could produce new or improved ideas, leading to self-empowerment and action.

Social and leisure elements of the groups, coupled with emotional satisfaction derived from group ownership/identity and the opportunities to volunteer and share knowledge, experiences, and accomplishments with others, further motivated involvement. This is corroborated by Van Den Berg et al. (2009), who found that adults were motivated to become involved in conservation education programs by drivers such as social benefits and the opportunity to participate in meaningful volunteer work. Moreover, our results indicate that the volunteer component functioned as an important mechanism for encouraging learning and skill development, while helping to further the reach of the organization. A DLC participant expressed the importance of satisfying multiple needs:

Our Landcare meetings...you sort of covered...the broad base of the whole lot. So over one day, you’d covered your cattle, your commodities...catching up with neighbors, Landcare stuff, your environmental stuff, all in one day. [4-8]

Social bonds were observed to be strongest for the groups with frequent, consistent meetings—as seen in the Landcare cases—suggesting these gatherings as key to establishing a sense of group community as well as providing a forum for peer exchange. As also observed, making time within these meetings for breaks and informal interaction may provide the opportunity for this relationship-building, as well as for discussion of expert information.
Thus, combining social gatherings, volunteer opportunities, and other social/emotional incentives may encourage involvement through provision of a more comprehensive organization, as well as providing opportunities for social learning, as described by Muro and Jeffrey (2008), in the form of “learning with” other landowners. Further, the trust, relationship-building, and motivation exhibited by the groups are all observed benefits of social learning catalyzed by participation in a group setting (Muro and Jeffrey 2008). The evidence thus indicates that social learning combined with adult learning theory offer a theoretical framework for understanding the appeal of the atmosphere created by these organizations.

In addition to similarities in form, groups exhibited commonalities in how they functioned to influence the flow of information within and beyond the organizations. The groups acted as networking tools, utilizing communication channels such as meetings and workshops, e-mail, and newsletters to facilitate access to information sources, including professional resources within and outside of the group. These results support the findings of Nagubadi et al. (1996), which indicated the importance of forestry organizations in raising landowner awareness of the benefits of forestry assistance programs. Meetings and events provided a forum for information sharing among landowners that otherwise might not have occurred. Additionally, membership crossover between the groups studied here and other local landowner community groups was common, indicating the groups’ roles in contributing to the larger landowner community network. The degree to which the groups fostered these relationships, however, varied among cases. Capitalizing on this networking opportunity via member liaisons, advertising events to other groups, and regular intergroup meetings—as seen with TREAT’s meetings of local reforestation groups—may increase resource availability for members, extend the reach of group information, and help to build broader landowner community.

The groups studied thus exhibited a balance of what the social capital literature refers to as “bonding” and “bridging” links, with the former ensuring strong trust bonds within the group and the latter promoting innovation and diffusion by creating connections outside the group; both are necessary for a resilient network (Newman and Dale 2005; Ohno et al. 2010). Consistent with Lin’s (2001) social network-oriented definition of social capital, results indicate the role of these groups in connecting landowners with important resources—not the least of which included one another.

The type of knowledge available through the groups emerged as an additional driver of interest among participants, including an intentional focus on local issues and personalized advice. The Landcare model provides a particularly interesting example of this; the diversity between DLC and TREAT alone demonstrated how the model could be fitted to rural or urban, rangeland or forest, and productive or restored landscapes. Participants also valued their access to hands-on learning opportunities and demonstration through field days, property visits, and interactive workshops, which some greatly favored over classroom-style learning. Hands-on learning can facilitate experiential learning, which fosters deeper learning through interaction with the environment rather than relying solely on transmission of information by an expert (Kolb 1984). Preference for experiential or experience-based learning, as discussed earlier in this article, is another tenet of adult learning theory, further confirming the expression of this theory within the groups. Participants also mentioned the benefit of pairing practical application with what they learned in the classroom. Thus, combining hands-on learning opportunities with lecture-style learning may provide a more complete learning experience for landowners.
The information provided by the groups influenced both participants and the broader landowner community in a variety of ways. While some participants mentioned specific behavior changes, such as managing invasive species, many had difficulty providing concrete examples of things they had done differently on their land as a direct result of group participation. Rather, they described how group involvement had refined preexisting ideas, provided direction for future work, or facilitated the accomplishment of preexisting goals. This latter service was most commonly expressed in DLC, the only group to have consistent flows of project grant funds. This funding accelerated project implementation, a finding corroborated by other research (e.g., Kilgore et al. 2007).

However, while evidence of direct behavior change on individual properties was variable among cases, groups consistently influenced participants in ways that underlay potential change, such as increasing resource awareness, shifting perceptions about the land, increasing confidence, and increasing overall involvement in the landowner community. Cary and Webb (2000) postulate that “membership of community landcare is likely to have a much stronger influence on behavior over a longer time frame by being a vehicle for the reinforcement and social transmission of norms for more appropriate environmental behavior” (22).

Information flow was not bounded to the groups alone, another finding corroborated by Cary and Webb (2000). However, networks need to be aware of the potential social barriers to diffusion identified in this study, namely, the strong hesitation toward “pushing” ideas on others. Yet while peer exchange may face social barriers, one MWM participant saw an opportunity for peer exchange to combat this same barrier:

It’s not a professional telling someone what they ought to do with their land, it’s just another landowner that...[is] just going to share their experience. [1-3]

Rather than an explicitly stated goal, peer exchange may be considered a means by which groups accomplished their primary goals, such as a stronger community or change on the landscape. Peer exchange was seen by leaders as a key product of the groups, and structural aspects of the groups facilitated the incorporation of peer exchange into group functions. Diversity in member perspectives allowed for representation of a broader range of landowner goals. As one MWM leader noted, a diversity of member volunteers had a greater chance of appealing to a diverse landowner community, and thus extending the reach of information. For landowners who do not feel that their personal goals align with those of experts, this provides an advantage over expert-driven outreach programs. The groups in this study provided a balance: the appropriate degree of heterophily between members to encourage the exchange of new information (Lin 2001) paired with the comfort of a homophilous setting, thus serving the important roles of change agent aides (Rogers 1995) or boundary spanners (Rickenbach et al. 2011).

Diversity in management experience among members contributed to the learning dynamic of the group, allowing newer owners to benefit from the knowledge of more experienced owners. Gosnell et al. (2006) found that while newer landowners in the Greater Yellowstone Ecosystem were more open to change, local knowledge was lost as longer term landowners moved away from the area. Thus, while newer landowners may be more interested in group involvement and information,
involving experienced landowners could allow the groups to capitalize on local knowledge. Identifying leadership opportunities—for example, board member, guest teacher, committee leader, property tour host—may provide a means of attracting these experienced landowners.

While the primary focus of this study was on peer exchange, it became clear that expert knowledge worked in concert with peer knowledge to satisfy the diverse needs of participants. While some participants were skeptical of government or professional information in general, there was frequent praise for the specific professionals involved with the group, especially those that were group leaders. Indeed, participants seemed to distinguish little in terms of comfort between peers and professionals within the group. These results suggest that the nonhierarchical nature of the groups and the more personal nature of the relationships formed allowed the groups to act as a medium through which professionals gained credibility among and access to the local landowner community.

Conclusion

In summary, despite their diversity, these five cases exhibited strong shared themes related to group atmosphere, information flow, and peer exchange. These themes persisted across cases regardless of geographic location, specific landowner audience, and level of expert involvement, suggesting that the key findings from this study may apply to a variety of other landowner learning networks and peer exchange environments. The data highlighted factors that worked in concert with peer exchange to enable the study groups to be effective learning environments and tools for information access and communication, confirming concepts central to adult learning, social learning, and social capital theory. The social nature of the organizations fostered a credible, comfortable learning environment in which landowners could access localized, experience-based knowledge from their peers, in addition to technical knowledge gained from professionals affiliated with the group. Additionally, strong leadership, hands-on learning opportunities, and the satisfaction of multiple landowner needs contributed to group appeal. The network created out of this environment provided social capital and an information resource that could benefit both members and the broader landowner community. Involvement with the group and access to group resources influenced participants’ awareness of land conservation issues, facilitated refinement and accomplishment of management goals, and generally increased interest and investment in various aspects of landowning.

As traditional outreach efforts have not succeeded in reaching the majority of family forest landowners, peer exchange may prove to be a key means of extending outreach. By leveraging interpersonal relationships and landowners’ own knowledge in an environment well-aligned with the preferences of many adult learners, peer exchange offers an accessible and attractive learning opportunity, as well as an opportunity to reduce pressure on limited professional landowner assistance capacity. As many studies classify segments of the landowner population as uninterested, unreachable, or otherwise difficult to access (e.g., Butler et al. 2007; Finley and Kittredge 2006), further research is needed on the potential of peer exchange and landowner networks to provide an avenue for reaching these landowners, as Rogers (1995) suggests that peer inspiration may be especially important for “late adopters” of innovations. Also, while this study indicated that group influence underlay potential behavior change, further research is needed on the link between
participation in landowner networks and behavior change. Finally, these findings illustrate the potential for landowner networks to catalyze information diffusion beyond the groups; additional studies such as demonstrated by Allred et al. (2010) are needed to more fully assess beyond-group effects.

Peer teaching and learning relationships are not new; they are established components of forest landowner outreach. In an era of diminishing capacity and resources for one-on-one landowner assistance (Schroeder et al. 2011), a diverse array of landowner groups, like the cases studied here, may play an increasingly prominent role in informing the decisions and behaviors of forest landowners. The combination of social theories exhibited in this study suggests a revised theoretical approach to landowner education, one that incorporates a more active landowner role in the learning experience. These findings contribute to understanding outcomes of peer exchange and landowner networks that may be of value to practitioners seeking alternative ways to efficiently engage landowners in learning about private land conservation and management.

Note
1. Asterisk indicates participant interviewed as a leader.

References


