

Social Media in Wilderness Stewardship

BY LISA EIDSON

Today's media system is no longer a top-down environment, and advocacy groups and government agencies are just beginning to embrace this new reality by identifying ways in which they can use Web 2.0 technologies to communicate more effectively with their constituents and employees. Although a recent study of social media use by 102 large national trade and advocacy organizations showed that almost 75% use 4 or fewer of the 14 most popular online social tools, the Sierra Club and the League of Conservation Voters topped the list by using 10 and 7, respectively (Ross, Stineman, and Lisi 2009). In government, the Transportation Security Administration, Department of Defense, Department of Health and Human Services, Library of Congress, and the Environmental Protection Agency, for example, are now uploading videos, blogging, tweeting, and networking through partnerships negotiated with social media sites such as Flickr, Twitter, YouTube and Facebook (General Services Administration 2008, 2009). Despite increasing adoption in both government and the private sector, many organizations remain skeptical, adopting a "you first" strategy. As our media systems continue to undergo profound transformation, how should we harness the power of the Internet and its new digital tools to reshape the ways that we manage information about our natural resources and wilderness areas?

An opportunity exists to discover how new media tools can be used for better government, advocacy, and public purposes. This article identifies three ways in which emerging Web 2.0 technologies can assist in wilderness stewardship by changing how employees, advocates, and volunteers share information and communicate about wilderness resources.

Blogging: Storytelling in a New Context

In a world where "each of us can create the content and tell our own story" (Center for Digital Democracy 2007, p. 1), one important use of storytelling in the context of wilderness stewardship is to preserve institutional knowledge. Knowledge

management research suggests that storytelling is a powerful knowledge disclosure method and its existence and quality are measures of the health of an institution and its ability to transfer complex tacit knowledge (Snowden 1999). Although not a traditional institution when liberally defined as a patchwork of government workers, advocacy organizations, research institutions, and volunteers, the wilderness workforce is largely made of committed, experienced, long-term members, many of whom will likely retire within the next decade. Estimates suggest that 40% of the American workforce, in general, is age 45 or older and, as such, increasing numbers are approaching retirement age (Dohm 2000). As growing numbers of Generation Y (18–30 year-olds) fill key stewardship positions, it becomes critical to bridge the generation gap, since Snowden warns that when tacit knowledge is the property of a limited number of individuals, it is at risk of being lost.

In the federal government, many wilderness managers reminisce about the genesis of their careers when the way to solve a common problem was to simply call people on a phone list or contact someone through a master performers network. These were the days when knowledge was transferred through stories. IBM's Knowledge Socialization Project describes a narrative as deeper, richer, more compelling, and more memorable than other modes of knowledge transfer because stories evoke truths that are commonly understood and communicate more information than is necessarily obvious (IBM Research 2009). In recent years, however, story sources have faded, as has the workforce's knowledge of and connection to itself, and "celebrity" managers, such as members of the



Lisa Eidson backpacking in the Scapegoat Wilderness in Montana. Photo courtesy of the author.

Arthur Carhart National Wilderness Training Center, have instead become the focal point of inquiry. Inundation with repeat questions has produced valuable online resources, including Wilderness.net's issue toolboxes (www.wilderness.net/toolboxes), as the primary tools for mining and preserving institutional knowledge from both internal and external sources. Although these online resources are products of pooled talent and expertise, they are an anonymous, impersonal, edited, one-way broadcast that has replaced storytelling and its foundational element of personal connection.

Today, however, the potential exists to revive storytelling through blogging as a way of transferring institutional knowledge. Stories often reveal lessons learned, and although capturing such lessons is certainly not a new organizational learning strategy—take the Wildland Fire Lessons Learned Center at www.wildfirelessons.net, for example—blogging enhances this type of storytelling as a two-way dialogue. A blog, or web log, is a web page on which an individual or group regularly posts items—text, images, embedded audio or video, links, blogrolls (links to other blogs), search terms, and more—that are displayed in reverse chronological order. Blog content is often distributed via Really Simple Syndication (RSS), a standard web feed format for viewing through a feed aggregator, such as FeedReader or FeedBurner, or for republishing to other web sites or social networks. In addition to providing an increasingly popular virtual venue for telling stories, blogs provide the opportunity for reader engagement, one of the qualities of good storytelling.

Research on blogging shows that 33% of Internet users are regular blog readers, with 11% doing so on a typical day, and 12% are blog creators (Smith 2008). According to the Pew Internet

and American Life Project (PIALP), increasing trends in Internet usage and technology adoption, in general, suggest that these numbers will continue to climb rapidly across all age brackets (Jones and Fox 2009). A PIALP survey specifically on blogging found that most bloggers view blogging as a way of communicating personal experiences, documenting ideas and events, storing resources, sharing knowledge and skills, and motivating others, and most blogs serve a relatively small audience of niche readers (Lenhart and Fox 2006). Overall, blogging provides individuals with a digital identity and a distributed, open, uncensored, persistent, and independent platform for sharing, while facilitating the connectivity necessary to transfer institutional knowledge via storytelling.

Social Networking: An Often Misunderstood Community of Practice

According to Shirkey, “Every webpage is a latent community” (2008, p. 102). Social networks, one form of online communities of practice, transform latency into action through connection, often by connecting geographically dispersed individuals. Social learning theorist Etienne Wenger defines communities of practice as groups of mutually engaged people involved in the sustained pursuit of a joint enterprise through shared repertoire (Wenger 1998); in other words, “People who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Wenger 2009, p. 4). Professional social networks are simply groups of workers or colleagues who do this virtually. For example, in 2000 Wilderness Watch created WildNet as a way to share articles, news, and action alerts with other wilderness advocates (Serra 2009). As a private advocacy-oriented Listserv currently

serving just over 100 members, WildNet is an early, niche example of a wilderness community of practice.

Recent informal discussions with the federal wilderness management agencies suggest that support exists for a broader wilderness-related professional social network inclusive of government; however, mention of such a network often produces questions such as the following from supervisors: How often should we *instruct* employees to participate in social networking, and how will this additional duty impact employee workloads? Who will *police or moderate* the network to ensure that erroneous information is not perpetuated as employees learn from each other? Emphasis is added to these questions that reveals a profound and abounding misunderstanding of crowd sourced content and of the role administrators should play.

The word *instruct* implies equality of participation; however, participation in any online social setting—social networks or listservs such as WildNet, where the most frequent contributors number fewer than 20 (Serra 2009)—occurs with “predictable imbalance” (Shirkey 2008, p. 122). A power law distribution generally characterizes any online social activity ranked by frequency of occurrence, in this case frequency of participation. As an example of a power law distribution, figure 1 shows the number of discussion forum posts, one type of online social interaction, made by each person in a hypothetical social network. A handful of network members are frequent and avid participants, making large numbers of contributions each; a minority of network members are moderate contributors, making between 10 and 30 posts each; the majority of network members, however, are infrequent contributors, making only a handful of posts, if any, each. Although this might

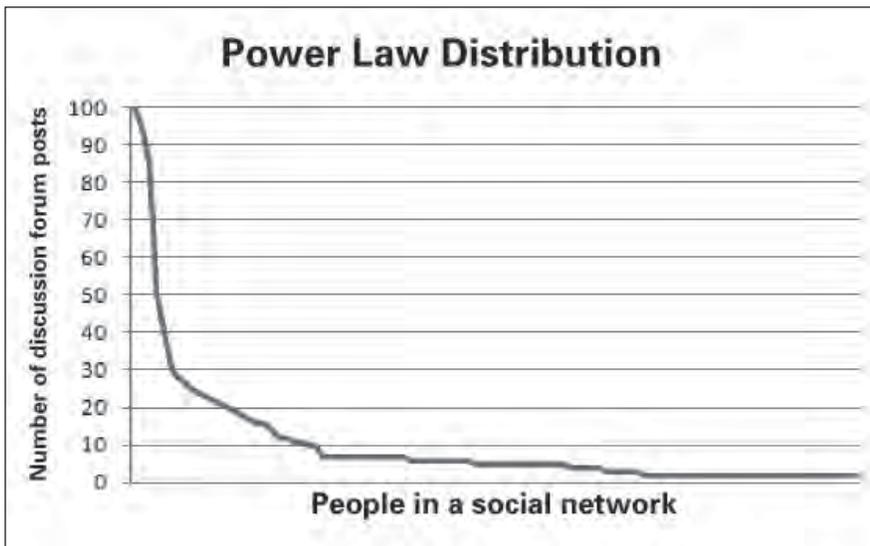


Figure 1—A power law distribution characterizes the frequency of participation in a social network.

appear disheartening, “Imbalance drives large social systems rather than damaging them” (Shirkey 2008, p. 125)—for example, a small percentage of Wikipedia users contribute to a tool that provides tremendous value for millions of noncontributors.

In addition to misunderstanding participation levels in social networks, comments suggesting the need for authoritarian monitoring reveal misunderstandings about oversight. In his social media blog, Edward Lenert, University of San Francisco media studies professor, writes that a network moderator “functions as the host of a conversation that features editor and audience in the co-production of content” (2009, p. 6). In a social network of any substantial size, crowd-sourced content becomes too voluminous to sufficiently police (Shirkey 2008). Although it might sound counterintuitive to allow a network to police itself, communities of practice have a vested interest in generating high-quality information because individuals in these communities are dedicated to bettering themselves at whatever task or interest they have in common. In fact, during WildNet’s 10 years of communication, even heated discus-

sions have generally remained civil, and only two members have been expelled from the group (Serra 2009). Self-improvement starts when individuals in a community share what they know and then converse with others about it. These interactions weed out useless, irrelevant, or incorrect information, and over time, the knowledge of the group, the collective intellectual capital of its members, far exceeds that of any individual overseer or oversight group. As such, supervisors and administrators should view themselves as participants in and contributors to the network, engaging others on the same level, with the same freedom of participation, and with the same goal of bettering themselves and the network through distributed oversight.

New Forms of Volunteerism

Volunteerism is playing an increasingly important role in wilderness stewardship and wilderness politics. Advocacy organizations routinely rally their members to take action in support of or opposition to various political measures. Declining budgets for land management have also increased reliance on volunteers to perform

on-the-ground work. In fiscal year 2002, for example, the Forest Service relied on 115,600 volunteers who performed the work equivalent to 8,400 full-time employees (Jensen and Guthrie 2005). In the past, formal organizations have typically relied on traditional media to organize volunteers; however, critical mass activism and volunteerism are now possible using new media.

Websites such as The Point (www.thepoint.com) and Fundable (www.fundable.com) apply the tipping point concept to group action, where the tipping point is the moment of critical mass, the threshold, “that one dramatic moment in an epidemic when everything can change all at once” (Gladwell 2000, p. 9). This means that coordinated action (e.g., a trail cleanup project) doesn’t occur until a sufficient number of people have committed (e.g., 50 people) and/or a certain amount of money has been pledged (e.g., \$100 for trash bags). Similarly, Meetup (www.meetup.com) helps groups achieve critical mass virtually for physical events or causes by matching them with interested local individuals and providing tools for coordination and outreach. In 2007, Friends of Oregon Badlands Wilderness began using Meetup as a “good way for a small, new organization to get started” coordinating volunteer work in what was recently designated the Oregon Badlands Wilderness (Eddleston 2009). The use of this new social tool has resulted in 25 successful meetups, including weed pulls, fence removal projects, trail cleanups, signage replacement, introductory hikes, and planning meetings for more than 200 Bend-area residents (Meetup Inc. 2009).

In his statement above, Gladwell likens the achievement of critical mass to an epidemic, and the popular term *going viral* is often used to describe how information travels from person

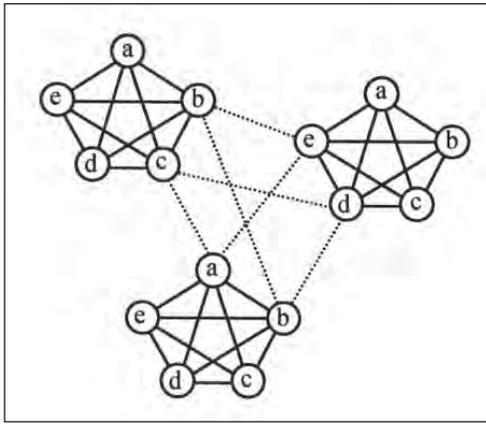


Figure 2—The Small World Network theory explains how people (lettered nodes) are connected to each other through dense connections or strong ties (solid lines) and sparse connections or weak ties (dashed lines) (adapted from Shirkey 2008, p. 217).

to person to result in a tipping point, or some form of coordinated action. Instant messaging, text messaging, and status updating services such as Twitter (www.twitter.com) facilitate viral information distribution. On May 12, for example, the Washington Trails Association used the following tweet to recruit volunteers for the 2009 field season: “WTA volunteer trail crews have already put in 19,816 hours of trail work in 2009. Have you earned your hardhat yet?” (Twitter 2009a). In October, the Forest Service Rocky Mountain Region used its Twitter feed to publicize volunteer trail work on the Continental Divide National Scenic Trail (Twitter 2009b).

Key to viral information distribution is the Small World Network theory, sometimes referred to by the common phrase “six degrees of separation,” which describes how everyone is connected to everyone else via a short chain of intermediaries, through the existence and balance of both dense and sparse connections (Watt 2003), as shown in figure 2. Small groups of people are tightly and strongly connected, whereas larger groups, including society as a whole, are connected through weak ties. Some individuals function as connectors, or

ambassadors, in that they have proportionately more weak ties, meaning that they serve as bridges between dense but separated groups of people (Gladwell 2000; Shirkey 2008). This type of network is a “conduit for the propagation of information” (Watt 2003, p. 48), such as retweets of the Washington Trails Association or Forest Service Twitter feeds, because communication is both efficient—information can pass between two people who don’t know each other by relatively few links—and robust—the loss of even several connections doesn’t impair overall communication. Collectively, the types of online social tools that facilitate formation of critical masses through viral information distribution provide volunteers with new ways of spreading information and organizing themselves to conduct wilderness stewardship activities.

Conclusion: Coevolution

Lenert’s (2009) website tagline touts that “we coevolve with our tools.” Evolution is apparent in the accelerating flexibility and intuitiveness of each subsequent generation or iteration of social media. As wilderness stewardship organizations embrace the use of social media, more specific customization is likely to occur to tailor various tools for wilderness purposes. It’s important, however, to realize that not only is the potential for the use of new social tools in wilderness stewardship paramount, the ways in which these new social tools will change wilderness stewardship are paramount also. Blogging, social networking, critical mass activism, and viral information distribution are social tools and phenomena poised to force us to coevolve and change the way we—wilderness staff, advocates, volunteers, and the public—distribute, share, and learn about wilderness.

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- Establishment of the International League of Conservation Writers
- Extraordinarily wide media coverage of WILD9 in national newspapers and mainstream magazines (such as *Este País*, *Elle*, *National Geographic*, in-flight magazines, etc.)
- The public launch of three new books on wilderness and protected areas, published in Spanish and English
- Local outreach, including daily participation in the WILD9 Expo and WildScreen film festival by thousands of Mérida residents, including local school groups of all ages; a project with local charities to create 20 life-size jaguar sculptures which now decorate the city of Mérida
- Body Painting—Applying the Ancient Art to Endangered Species and Spaces, a stunning evening exhibition by 20 artists and models documented by five of the world's top conservation photographers.

The Next Step—Nature Needs Half

For the first time in a WWC, WILD9 ended by outlining a new vision for WWC as it moves forward. Coordinated by The WILD Foundation, the Nature Needs Half initiative (originally “At Least Half Wild”): A science and common-sense based conservation vision and campaign that positions nature as a core concern of global development and

human well-being, with a goal of protecting and interconnecting at least half of the world's lands and seas.

The mechanisms for such protection should be culturally appropriate and be implemented at a variety of scales, including international, national, provincial, aboriginal, regional, and municipal, as well as private individual, corporate, and NGO landowners. This is the right thing to do for ourselves and for everything that shares this beautiful planet with us. Wild nature is as necessary to our psychological well-being as it is to our ability to breathe clean air, drink pure water, and have a livable climate. The love of nature exists in every culture but it has been relegated to secondary status by the idea of “progress,” modeled on the Industrial Revolution.

The “at least half” idea moves nature to the center of the human endeavor in the 21st century and away from being treated simply as another competing interest. Achieving it will require a global movement for the reintegration of the arts, sciences, business, efforts to address the climate and biodiversity loss, and the integration of the needs of wild nature with those of human society (see www.wild.org).

As the science, policy, and communications involved in Nature Needs Half are organized and underway with many

collaborators, information will be collated and made available initially at www.wild.org, then on a dedicated website.

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