

# Don't Tread on Me: Increasing Compliance with Off-Road Vehicle Regulations at Least Cost

V. William Scarpato\*

*In a world of diminished enforcement resources, how can environmental regulators get the most bang for their buck? Off-road vehicle use is the fastest growing and most contentious form of recreation on America's public lands. Motorized recreationists have enjoyed access to National Forests and Bureau of Land Management (BLM) land for almost a century, but regulators, property owners, and environmental groups have voiced opposition to unconstrained off-road vehicle use. Law enforcement on these lands is underfunded and ineffective, and the individualist culture of off-road vehicle users is said to foster an attitude of non-compliance — trailblazing in the literal sense. Endorsing and building upon work in law and social norms and cognate disciplines, this Article draws principally on the social psychology of effective messaging outlined in Chip and Dan Heath's 2007 work, *Made to Stick*, to propose a partnership-based campaign based on the exhortatory theme, "Don't Tread on Me."*

I. INTRODUCTION .....	136
II. DEFINING THE PROBLEM: OFF-ROAD VEHICLE USE ON PUBLIC LANDS .....	139
A. ORV background .....	140
1. The historical growth of ORV use.....	140
2. ORV use today — demographics and noncompliance .....	141
a. Demographics .....	141
b. Alleged noncompliance.....	143
B. Limited reach: the current legal regime for ORV regulation .....	146
C. Suggested reforms .....	149

---

\* Third-year student at the Temple University James E. Beasley School of Law. Thank you to Sarah and Nellie for their love and to Professor David A. Hoffman for his tireless and demanding mentorship.

III. STICKY IDEAS AND COMPLIANCE .....	151
A. <i>Made to Stick</i> .....	151
1. Simple – convey (only) what is most important .....	152
2. Unexpected — curiosity and mystery supply their own interest .....	154
3. Concrete — tangible imagery makes things easier to understand and retain.....	155
4. Credible — an influential idea is a believable idea .....	156
5. Emotional – resonant ideas compel individuals to act.....	157
6. Stories — narratives are more compelling than arguments ....	161
IV. DON’T TREAD ON ME: APPLYING THE PSYCHOLOGICAL LITERATURE TO ORV USE .....	162
A. Evaluating proposed solutions — local partnerships that focus on shaping ORV user norms are preferable to traditional law enforcement or revamping federal statutes .....	162
B. Evaluating current messaging — messages rightly focus on motivating ORV users but can be revised.....	164
C. Don’t Tread on Me .....	165
V. CONCLUSION .....	169

## I. INTRODUCTION

In September 2008, Bill Keenan was nearly decapitated while riding a dirt bike near Basalt Mountain in the White River National Forest.<sup>1</sup> Riding with some friends at about thirty miles per hour, he dove from his vehicle when he saw a line of barbed wire slung tightly at neck level three feet in front of his face.<sup>2</sup> Keenan escaped the trap with lacerations and a shattered chest protector, but he was convinced that local hunters had set the wire to stop off-road vehicles.<sup>3</sup> As the thirty-seven-year-old equipment operator reported, “it was near-death sabotage . . . . It was definitely done by someone trying to hurt riders.”<sup>4</sup> No suspect was ever identified.<sup>5</sup>

Keenan’s is just one among many stories of individuals taking matters into their own hands to try and curb the explosive proliferation off-road vehicles (ORVs)<sup>6</sup> on both public and private land.<sup>7</sup> ORV use is “one of the fastest

<sup>1</sup> Kai Beech, *Biker Says He Almost Lost his Head*, ASPEN DAILY NEWS, Oct. 6, 2008, <http://www.aspendailynews.com/section/home/129734>.

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

<sup>5</sup> *See id.* (explaining that finding out who commits these actions is nearly impossible).

<sup>6</sup> ORVs include many kinds of machines beyond the Jeep-type automobile, including motorcycles, snowmobiles, personal watercraft, three-wheeled vehicles, and all-terrain vehicles

growing categories of outdoor activity in the country” according to official surveys.<sup>8</sup> But as reports of violent clashes intimate, unsanctioned ORV use off of permitted trails has proven an intractable problem for users and managers of public lands.<sup>9</sup> There are over 446 million acres of U.S. Forest Service and Bureau of Land Management land.<sup>10</sup> ORV users have created an estimated 14,000 miles of unofficial trails on these lands.<sup>11</sup> Agency personnel are each expected to patrol hundreds of thousands of acres for motor vehicle violations, and funds are often unavailable to increase manpower even when those increases are authorized.<sup>12</sup> These resources are completely inadequate to enforce agency trail designations.<sup>13</sup> In a physically remote competition between particularized benefits and diffuse harms, what can be done to rein in ORVs?

ORV use rests at the most tenuous intersection of law and individual decision making. As Professor Fred Cheever explains, “[i]f you’re looking for a candidate for a not particularly successful behavior modification strategy on public lands . . . [the] no vehicles allowed signs in many wilderness and

---

(ATVs). DAVE HAVLICK, ROARING FROM THE PAST: OFF-ROAD VEHICLES ON AMERICA’S NATIONAL FORESTS 2 (1999) [hereinafter HAVLICK, ROARING FROM THE PAST]. As Byron Kahr explains, “the terms ‘off-highway vehicles’ and ‘off-road vehicles’ are often used interchangeably.” Byron Kahr, *The Right to Exclude Meets the Right to Ride: Private Property, Public Recreation, and the Rise of Off-Road Vehicles*, 28 STAN. ENVTL. L.J. 51, 52 n.1 (2009). Though the two terms can have distinct meanings in certain contexts, *id.*, I use the term “off-road vehicle” or “ORV” in this Article for the sake of simplicity. It should be taken to include all of those motorized, overland forms of transport used for recreational purposes on public lands.

<sup>7</sup> In Pennsylvania, locals discovered fishing line with hooks hanging from trees over off-road routes. RESPONSIBLE TRAILS AMERICA, OFF-ROAD VEHICLES (ORVs): A PATTERN OF RECKLESS & VIOLENT BEHAVIOR THAT IS SPINNING OUT OF CONTROL 1 (2009) (quoting Joe Gordon, *Joe Gordon Column*, THE TRIBUNE – DEMOCRAT, Aug. 9, 2008), available at <http://minnesotaindependent.com/wp-content/uploads/2009/03/incidents-of-violence-1.pdf>. In Connecticut, thirteen-year-old Nicholas Parisot was killed by neck trauma when he ran into a rope strung at neck level across a trail near his grandmother’s home. Korey Wilson, *Four Years Later, Many Questions Remain in Parisot Case*, THE HOUR ONLINE, June 10, 2012 available at [http://www.thehour.com/news/wilton/four-years-later-many-questions-remain-in-parisot-case/article\\_6929004b-33e8-5f1a-bd70-4d7f6290b0c8.html](http://www.thehour.com/news/wilton/four-years-later-many-questions-remain-in-parisot-case/article_6929004b-33e8-5f1a-bd70-4d7f6290b0c8.html); see also Emily Bazar, *Off-road Vehicle Use Fuels Tension, Violence Across U.S.*, U.S.A. TODAY, Dec. 30, 2008, available at [http://www.usatoday.com/news/nation/2008-12-30-off-road-clashes\\_N.htm](http://www.usatoday.com/news/nation/2008-12-30-off-road-clashes_N.htm) (mentioning the Parisot case and giving an overview of the problem of unconstrained ORV use nationwide).

<sup>8</sup> H. KEN CORDELL ET AL., OFF-HIGHWAY VEHICLE RECREATION IN THE UNITED STATES, REGIONS AND STATES: A NATIONAL REPORT FROM THE NATIONAL SURVEY ON RECREATION AND THE ENVIRONMENT (NSRE) 9 (2008).

<sup>9</sup> John C. Adams & Stephen F. McCool, *Finite Recreation Opportunities: The Forest Service, the Bureau of Land Management, and Off-Road Vehicle Management*, 49 NAT. RESOURCES J. 45, 48 (2009) (citing ROBERT E. MANNING, STUDIES IN OUTDOOR RECREATION: SEARCH AND RESEARCH FOR SATISFACTION 156-74 (2d ed. 1999)).

<sup>10</sup> U.S. GOV’T ACCOUNTABILITY OFFICE, FEDERAL LANDS: ENHANCED PLANNING COULD ASSIST AGENCIES IN MANAGING INCREASED USE OF OFF-HIGHWAY VEHICLES 3 (2009) [hereinafter GAO Report].

<sup>11</sup> *Id.* at 10.

<sup>12</sup> *Id.* at 38.

<sup>13</sup> *Id.* at 35.

wilderness study areas are made of fiberglass so they will survive being run over.”<sup>14</sup> The regulator must reach the ORV rider idling on the trail, just before he or she revs off into the untouched terrain beyond, often without the benefit of any nearby official (or even any witness at all).<sup>15</sup>

Since classical means of behavioral modification are often unfeasible on public lands, it makes sense to turn to alternative models based on shaping social norms and reciprocity theory.<sup>16</sup> Recognizing this, the agencies have turned to partnership-based strategies, but their execution has been spotty.<sup>17</sup> This Article starts with the observation that social norms and reciprocity theories present an attractive alternative to the problem of regulating ORV use and add to them by elaborating on their implementation, describing psychological findings that define how information could be “skillfully presented” to “affect the expected utility calculus by triggering norms.”<sup>18</sup>

The psychological literature supplies a set of practices in the way messages concerning ORV use could best be transmitted. In 2007, Chip and Dan Heath presented some of these psychological signposts in a popular work, *Made to Stick: Why Some Ideas Thrive and Others Die*.<sup>19</sup> Surveying psychological research, lessons from current events, and business successes, the Heaths were able to identify six non-exclusive characteristics of “sticky” ideas: they are (1) simple, (2) unexpected, (3) concrete, (4) credible, (5) emotional, (6) stories.<sup>20</sup> As the Heaths explain, messages that are made up of some or all of the “SUCCEs” framework stand a greater chance of getting people’s attention, keeping it,

---

<sup>14</sup> E-mail from Professor Fred Cheever, Associate Dean of Academic Affairs and Professor, University of Denver – Sturm College of Law, to author (Jan. 30, 2012, 19:24 EST) (on file with author). See also GAO Report, *supra* note 10, at 40 (stating that agency officials have reported incidents of signs being “shot at, pulled out, or driven over”). “[S]igns at some units are vandalized or taken down less than 48 hours after installation.” *Id.*

<sup>15</sup> See *National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands*, U.S. DEP’T OF THE INTERIOR: BUREAU OF LAND MANAGEMENT (2001), <http://www.nplnews.com/library/ohv/ohv-plan-jan192001.pdf> (explaining that public land is “often very remote” and that each Bureau of Land Management law enforcement official covers roughly 1.76 million acres on average).

<sup>16</sup> See generally Dan M. Kahan, *Reciprocity, Collective Action, and Community Policing*, 90 CALIF. L. REV. 1513 (2002); Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903 (1996).

<sup>17</sup> See generally U.S. FOREST SERVICE, OFF-HIGHWAY VEHICLE USE AND COLLABORATION: LESSONS LEARNED FROM PROJECT IMPLEMENTATION 2005.

<sup>18</sup> Michael P. Vandenberg, *From Smokestack to SUV: The Individual as Regulated Entity in the New Era of Environmental Law*, 57 VAND. L. REV. 515, 521 (2004); see also Katrina Fischer Kuh, *When Government Intrudes: Regulating Individual Behaviors that Harm the Environment*, 61 DUKE L.J. 1111, 1118 n.17 (2012) (providing examples of norms-based proposals in the field of environmental law in arguing for the continued relevance of more traditional forms of behavior modification).

<sup>19</sup> CHIP HEATH & DAN HEATH, *MADE TO STICK: WHY SOME IDEAS SURVIVE AND OTHERS DIE* (2007).

<sup>20</sup> *Id.* at 14-18.

engaging their memory, and causing them to act in a certain way.<sup>21</sup>

Other social psychology research that the Heaths incorporated has attacked the question of how to induce people to act on external stimuli. Research in the psychology of compliance has illuminated some social phenomena — reciprocity, commitment, and social proof, among others — that are “weapon[s] of automatic influence.”<sup>22</sup> In this manner, the Heaths’ contribution dovetails with reciprocity theorists like Professor Dan Kahan.<sup>23</sup> The psychology shows that there is significant room for improvement in what is communicated to ORV users and how that communication is mediated. A message attuned to the psychology of compliance would lead more ORV users to limit themselves to officially acceptable activity by working the same (or greater) social influence as traditional, negative legal mechanisms like fines, especially when a Forest Service Ranger with the capacity to issue a ticket is typically miles away at the moment of transgression.

This Article begins with an overview of ORV use on public lands in the United States, providing a brief history, an outline of its current status, and a birds-eye view of the legal frameworks that control. From that foundation, an explanation of ORV use demographics and the pervasive issue of noncompliance sets the scene for a discussion of several proposed solutions. These include statutory revision, federal-local and public-private partnerships, and revision of user norms. This Article then turns to a review of psychological literature, including the Heaths’ SUCCEsS framework, and compliance studies, both of which align with the work of law and social norms scholars in reciprocity and Cultural Cognition. That review will suggest that some public-private partnerships and nongovernmental groups are on the right track in presenting motivational rather than enforcement-based messaging to ORV users. A revised message to ORV users based on the theme, “Don’t Tread on Me,” may be more successful than current deterrence- and awareness-based attempts to curb unwanted ORV use.

## II. DEFINING THE PROBLEM: OFF-ROAD VEHICLE USE ON PUBLIC LANDS

Off-road vehicle use on public lands is controversial. On the one hand, as the Forest Service has stated, ORV activity is a legitimate use of federal resources,

---

<sup>21</sup> *Id.*

<sup>22</sup> ROBERT B. CIALDINI, *INFLUENCE: THE PSYCHOLOGY OF PERSUASION* 9 (Collins Business Essentials, 2007 ed. 1984).

<sup>23</sup> Dan M. Kahan & Donald Braman, *Cultural Cognition and Public Policy*, 24 *YALE L. & POL’Y REV.* 149, 149-50 (2006) (describing a theory of Cultural Cognition in which individuals disagree on empirically testable issues because they rely on experts that validate their view of the ideal society); *see, e.g.*, Dan M. Kahan, *The Logic of Reciprocity: Trust, Collective Action, and Law*, 102 *MICH. L. REV.* 71, 71-72 (2003) (positing a theory of collective action that individuals often act as spontaneously emotional reciprocators rather than as rational wealth maximizers).

one of the many forms of recreation for which this land has been used for decades.<sup>24</sup> The ORV community thus has precedent upon which to base an argument for continued, unrestrained activity. On the other hand, the growth of motorized vehicle activity affects many classes of stakeholders.<sup>25</sup> Non-motorized recreationists, environmental groups, and private landowners have all opposed unrestrained ORV use at times.

Government has been hard-pressed to enforce limits on the activity. It is important to note that this Article cannot and does not attempt to determine whether ORV use on public lands is good or bad. Rather, acknowledging that federal agencies have found it necessary to place some limits on ORV use, this Article attempts to present a technocratic answer to a legal-governmental problem complicated by limited budgets, interests at loggerheads, and questionable compliance with existing regulations.

This part will outline the issues of ORV use on public lands. It will do so in three sections. The first section will give background information on ORV use in public lands, including its history, its current status, and the problem of noncompliant ORV users that have been said to flaunt the law. The second section will give a brief overview of the standing legal framework within which relevant regulations operate, focusing on the U.S. Forest Service (USFS) and the Bureau of Land Management (BLM). The third section will discuss some proposed solutions to the compounding problems of ORV use, ultimately demonstrating that, after determining that traditional behavioral modification methods are unavailing, a review of the psychological literature is appropriate in order to ensure that messaging reaches ORV users effectively.

#### A. *ORV background*

As the psychological literature will make clear, it is important to know who is riding these vehicles and the shape of their communities. Thus, a brief history of ORVs on public lands and an overview of current patterns of use are warranted. This section will then discuss alleged problems of noncompliance among ORV user communities. Ultimately, the particular character of these issues suggests that traditional law will be insufficient to remedy the problem on its own.

##### 1. The historical growth of ORV use

The origins of ORV use extend nearly as far back as the invention of the automobile.<sup>26</sup> As early as 1922, it was estimated that almost half of the newly

---

<sup>24</sup> *Four Threats to the Health of the Nation's Forests and Grasslands*, U.S. FOREST SERVICE, <http://www.fs.fed.us/projects/four-threats> (last updated Oct. 30, 2006).

<sup>25</sup> Jan G. Laitos & Rachael B. Reiss, *Recreation Wars for our Natural Resources*, 34 ENVTL. L. 1091, 1098-01 (2004).

<sup>26</sup> Adams & McCool, *supra* note 9, at 73.

invented machines were being used for outdoor recreation.<sup>27</sup> But it was not until after World War II that the jeep came home victorious, leading to dramatically increased ORV vehicle usage.<sup>28</sup> In addition, mounting demands for timber spurred further road construction on public lands, improvements that both loggers and recreationists would enjoy.<sup>29</sup> Compounding these developments, in the early 1960s, Honda introduced an inexpensive, lightweight, rugged motorcycle with enough power to run on unfinished terrain, opening the activity to considerably more people.<sup>30</sup> Since that time of aligned recreational and extractive interests, ORV use on public lands has been characterized by rapid growth.<sup>31</sup>

With exploding ORV use and the proliferation of sanctioned and unsanctioned road networks, a presumption of “easy and immediate access” on public lands has developed over time.<sup>32</sup> Those hoping to curb ORV use face the difficult problem that it has been a largely unfettered activity for almost ninety years — the right to ride on public lands is now an expectation.<sup>33</sup>

## 2. ORV use today — demographics and noncompliance

### a. Demographics

According to the USFS, nearly one out of every five Americans participates in off-road activity.<sup>34</sup> The western region of the country accounts for the greatest per capita ORV usage, while the northern and eastern portions of the country account for the least.<sup>35</sup> Since those states in the Interior West have high

---

<sup>27</sup> DAVID G. HAVLICK, NO PLACE DISTANT: ROADS AND MOTORIZED RECREATION ON AMERICA'S PUBLIC LANDS 20 (2002) [hereinafter HAVLICK, NO PLACE DISTANT].

<sup>28</sup> Adams & McCool, *supra* note 9, at 73. Indeed, the Jeep was essentially the only viable private ORV design of the time. *Id.* at 73 n.122 (citing PATRICK R. FOSTER, THE STORY OF THE JEEP 24 (1st ed. 1998)).

<sup>29</sup> See Jim DiPeso & Tom Pelikan, *The Republican Divide on Wilderness Policy*, 33 GOLDEN GATE U. L. REV. 339, 354 (2003) (explaining that “[m]any roadless areas in national forests were left wild because there was little demand for their timber before World War II,” while the post-war years saw large increases in timber harvesting). As David Havlick recounts, between 1946 and 1949, there was an additional 100,000 miles of forest roads built to access timber to “feed the demand of a booming nation.” HAVLICK, NO PLACE DISTANT, *supra* note 27, at 26.

<sup>30</sup> Adams & McCool, *supra* note 9, at 73.

<sup>31</sup> See, e.g., HAVLICK, ROARING FROM THE PAST, *supra* note 6, at 2 (stating that ATV sales increased by 250% and snowmobile sales increased by roughly 200% in the 1990s); Jeffrey L. Bleich, Student Article, *Chrome on the Range: Off-Road Vehicles on Public Lands*, 15 ECOLOGY L.Q. 159, 161 (1988) (explaining that ORV sales quintupled in the 1960s);.

<sup>32</sup> HAVLICK, NO PLACE DISTANT, *supra* note 27, at 34.

<sup>33</sup> *Id.*

<sup>34</sup> See CORDELL ET AL., *supra* note 8, at 10 (showing that between 1999 and 2007, an average of 18.6% of the U.S. population participated in ORV activities).

<sup>35</sup> *Id.* at 18. The West is grouped as Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming, with a 28.1% participation rate. *Id.* The North is groups as Connecticut,

proportions of public land and correspondingly higher ORV participation rates,<sup>36</sup> this Article will focus on these states particularly (but not exclusively).

Households with the highest income levels show the greatest participation rate, but that rate is declining; rates in the lower income strata are increasing.<sup>37</sup> Similarly, ORV use among post-graduates is declining as it is increasing among those without a high school education.<sup>38</sup> Just over half of ORV users nonetheless hold at least a high school education.<sup>39</sup> Nationally, the majority of ORV users are urban white males under age fifty.<sup>40</sup> At the state level, more detailed demographic studies allow for greater understanding of who rides and what motivates them.<sup>41</sup>

For instance, in Utah, the Institute for Outdoor Recreation and Tourism completed a 2001 survey on behalf of the Utah Department of Natural Resources that logged ORV user demographics and use preferences.<sup>42</sup> Mostly consistent with national demographics, the average Utah ORV owner is a middle-income male between age forty-three and forty-four.<sup>43</sup> Less than one out of ten belong to an ORV organization.<sup>44</sup> Most travel to either BLM or Forest Service land for their ORV activity,<sup>45</sup> and between twenty-five and fifty percent of ATV and motorcycle riders, who account for the lion's share of ORV users,<sup>46</sup> prefer to ride off of established trails when possible.<sup>47</sup>

Colorado is similar. According to a study completed by a public relations consultancy on behalf of the Colorado Coalition for Responsible Off Highway Vehicle (OHV) Riding,<sup>48</sup> the average rider in 2001 was a white male, age forty, with a high school education, a \$50,000 annual household income, and pride in

---

Delaware, the District of Columbia, Illinois, Indiana, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin, with a 16.1% participation rate. *Id.*

<sup>36</sup> *Id.*

<sup>37</sup> *Id.* at 11.

<sup>38</sup> *Id.* The number of days per year in which individuals without a high school diploma participated in ORV activities nearly tripled between 1997 and 2007, from twenty-three to sixty-two days. *Id.* at 17.

<sup>39</sup> *Id.*

<sup>40</sup> *Id.* at 10.

<sup>41</sup> *Id.* at 18.

<sup>42</sup> See generally ANDREA L. FISHER ET AL., OFF HIGHWAY VEHICLE USES AND OWNER PREFERENCES IN UTAH I (2001).

<sup>43</sup> *Id.* at 7, 10.

<sup>44</sup> *Id.* at 14.

<sup>45</sup> *Id.* at 36.

<sup>46</sup> *Id.* at 34.

<sup>47</sup> *Id.* at 36. In the hopes of clarity and to avoid vagueness, the survey asked respondents to describe their last trip rather than their average trip. *Id.* at 35-36.

<sup>48</sup> The Coalition uses "OHV" for Off-Highway Vehicle but focuses on the same issues as those discussed here.



the state of Colorado.<sup>49</sup> Four-fifths of Colorado users do not belong to an organized club.<sup>50</sup> A separate survey reveals that over half of ORVs owned are ATVs or “Off-Highway Motorcycle[s],”<sup>51</sup> and the majority of use occurs on either USFS or BLM land.<sup>52</sup> Coloradan ORV users appear aware of the environmental implications of their activity,<sup>53</sup> but some have reacted negatively to trail closures by federal land managers.<sup>54</sup> Focus group results for both adults and children show that most understand the need to stay on established trails;<sup>55</sup> however, the working assumption is that roughly two-thirds of adult riders still go off-trail sometimes and as many as one-fifth do so frequently.<sup>56</sup> Unsurprisingly, the USFS has recognized “the uncontrolled proliferation of trails arising from repeated cross-country forays by [ORV] traffic” as a national trend that is “a major problem for forest managers.”<sup>57</sup>

b. Alleged noncompliance

ORV disputes are exacerbated, rightly or wrongfully, by an alleged undercurrent of persistent, knowingly unlawful use that is said to be symptomatic of an individualist ORV culture.<sup>58</sup> As the combined results of the Utah and Colorado surveys described above suggest, even though most ORV users know and understand that staying on-trail is an important limit on their activity,<sup>59</sup> a majority of users prefer breaking new trail,<sup>60</sup> most do so from time to time, and as many as one-fifth do so on a regular basis.<sup>61</sup> In his article in the

---

<sup>49</sup> LISA MARIE FRUEH, STATUS AND SUMMARY REPORT ON OHV RESPONSIBLE RIDING CAMPAIGN 3, 7 (2001), available at <http://www.wildlandscpr.org/files/CO%20OHV%20Focus%20Group%20StatusSummaryReport1.pdf>. The premise of this report is that conflicts over ORV use should be solved by targeting “key user groups” with a “motivational” message rather than increasing information, education, or, by implication, enforcement. *Id.* at 1. This premise is completely in line with the psychological research considered in Part III below. This Article not only provides a rebuttal to the proposed solutions that focus on legal or enforcement remedies but also gives suggested content in Part IV for what Lisa Frueh’s study recognizes as the most promising solution to ORV use problems.

<sup>50</sup> *Id.* at 3.

<sup>51</sup> TOM CRIMMINS, COLORADO OFF-HIGHWAY VEHICLE USER SURVEY: SUMMARY OF RESULTS 3-4 (1999).

<sup>52</sup> *Id.* at 4.

<sup>53</sup> *Id.* at 7.

<sup>54</sup> *Id.* at 9.

<sup>55</sup> FRUEH, *supra* note 49, at 7, 8.

<sup>56</sup> *Id.* at 10-11.

<sup>57</sup> U.S. FOREST SERV., UNMANAGED MOTORIZED RECREATION 1 (n.d.), available at <http://www.fs.fed.us/publications/policy-analysis/unmanaged-recreation-position-paper.pdf>.

<sup>58</sup> See Kahr, *supra* note 6, at 58.

<sup>59</sup> See FRUEH, *supra* note 49, at 7, 8 and accompanying text for a description of the Colorado ORV user survey showing that most recognize staying on-trail as important.

<sup>60</sup> See FISHER ET AL., *supra* note 42, at 36 and accompanying text for a description of the Utah ORV user survey showing that most prefer riding off of established trails.

<sup>61</sup> See FRUEH, *supra* note 49, at 10-11 and accompanying text for the Colorado ORV user

*Stanford Environmental Law Journal*, Attorney Byron Kahr states that “a permissive ‘right to ride’ norm tends to trump the ‘stay on established trails’ norm among a sizeable majority of ORV users,” among whom there is a “‘bad apple’ category that will not be responsive to formal rules and regulations or to social norms of polite recreational behavior.”<sup>62</sup>

Even if it misrepresents the ORV community as a whole, and although direct evidence of it is elusive, secondary evidence of extensive noncompliance abounds. In 1998, 91 of 128 National Forests responding to a Freedom of Information Act (FOIA) request reported “motor vehicle violations” of some stripe, to include leaving established roads and breaching environmental or safety standards.<sup>63</sup> Unsanctioned user-created trails are estimated to have grown by the thousands of miles since the 1970s.<sup>64</sup> It should be noted that the exact mileage of these unofficial trails is currently unavailable; as of 2008, there has been no inventory of them made, none has been required by Congress or central agency leadership, and their continuing creation makes any cataloging effort instantly obsolete.<sup>65</sup> The creation of unsanctioned trails has been among the foremost complaints concerning ORV user conduct, and it constitutes a “major challenge” to forest management.<sup>66</sup> Correspondingly, encouraging responsible

---

survey results supporting these figures.

<sup>62</sup> Kahr, *supra* note 6, at 59 (quoting William J. Kockelman, *Management Practices, in ENVIRONMENTAL EFFECTS OF OFF-ROAD VEHICLES: IMPACTS AND MANAGEMENT IN ARID REGIONS* 447, 448 (Robert H. Webb & Howard G. Wilshire, eds., 1983)). The arguments over unsanctioned ORV use are sometimes very biting. David Havlick, a vocal advocate for limiting motorized recreation on public lands, has written that “a number of riders also flaunt the law, ignore trail etiquette, and violate rules to reduce ecological harm . . . [H]aving a powerful machine at fingertip command seems to inspire boorish behavior.” HAVLICK, NO PLACE DISTANT, *supra* note 27, at 103. In the face of these assaults, the “right to ride” norm runs deep in the writings of ORV advocates. See, e.g., Phil Howell, *Extreme View: Tread Lightly?*, EXTREME4X4.COM (2001), [http://www.extreme4x4.com/departments/extreme\\_view/tread\\_lightly.html](http://www.extreme4x4.com/departments/extreme_view/tread_lightly.html) (deriding Tread Lightly!, an ORV responsible-use organization, because its principle of staying on “designated” trails cedes the decision of where ORV users may ride to government agencies and environmentalists).

<sup>63</sup> HAVLICK, ROARING FROM THE PAST, *supra* note 6, at 8. These noncompliant users are reported to typically leave the trail either to find pristine natural beauty or to meet daunting recreational challenges. Kahr, *supra* note 6, at 59. Federal land managers are no strangers to illegality. Members of the Wise-Use Movement, mainly motivated by federalist principles of local government and extractive interests, have resorted to violent tactics against the USFS, environmentalists, and others. See generally Patrick Austin Perry, *Law West of the Pecos: The Growth of the Wise-Use Movement and the Challenge to Federal Public Land-Use Policy*, 30 LOY. L.A. L. REV. 275 (1996).

<sup>64</sup> Laitos & Reiss, *supra* note 25, at 1103.

<sup>65</sup> Travel Management Directives, 73 Fed. Reg. 74,689, 74,689-91 (2008). Trail mileage for user-created trails is one among many metrics for measuring noncompliant ORV use. This Article relies on several, including self-reporting. Unfortunately, much of the isolation that makes ORV use both so attractive to participants and difficult to control also makes its exact scope difficult to study with certainty.

<sup>66</sup> *Id.* at 74,690; Jay Wilkinson, Note, *The New Competing Uses: Balancing Recreation with Preservation in Utah’s Wasatch Mountains*, 24 LAND RESOURCES & ENVTL. L. 561, 576 (2004). ORV users explain that official trails are often dead ends, and they must strike out on their own to

use has been a central theme in many efforts seeking to shape the future of motorized recreation on public lands.

For example, the Colorado user survey described above was sponsored as part of an effort to motivate ORV users to conduct themselves safely and with environmental consciousness.<sup>67</sup> The Colorado Coalition for Responsible OHV Riding was inspired to take up this task by signs that land is “being abused” by ORV use.<sup>68</sup> Today, Stay The Trail Colorado has at least implicitly incorporated the suggestions of this user survey by using exhortatory materials that link pride of place with stewardship to “reinforce and highlight responsible OHV use, and to modify and mitigate irresponsible use in an effort to minimize resource damage on public land.”<sup>69</sup>

The Tread Lightly! program is devoted to the same mission on a national scale.<sup>70</sup> Founded in 1985 by the USFS, Tread Lightly! has since become a private non-profit organization and is an influential presence in ORV issues, reaching an audience of millions each year through its own programs and associated media coverage.<sup>71</sup> Its principles of responsible use have gained traction among ORV suppliers and federal agencies particularly.<sup>72</sup> Even the Blue Ribbon Commission (BRC), a leading ORV open-access advocacy group,<sup>73</sup> has expressed agreement in certain contexts.<sup>74</sup> The BRC itself has felt the need to simultaneously admonish users to behave responsibly and defend against those who argue for limiting access because of the breadth of compliance issues.<sup>75</sup>

---

reach other trails. *Id.* at 577.

<sup>67</sup> FRUEH, *supra* note 49, at 1.

<sup>68</sup> *Id.*

<sup>69</sup> *About Stay the Trail*, STAY THE TRAIL COLORADO, [staythetrail.org/about/index.php](http://staythetrail.org/about/index.php) (last visited May 4, 2012).

<sup>70</sup> *About Us: An Overview of Tread Lightly!*, TREAD LIGHTLY!, <http://treadlightly.org/about-us/> (last visited Apr. 10, 2013).

<sup>71</sup> *Id.*

<sup>72</sup> *Current Official Partners*, TREAD LIGHTLY!, <http://treadlightly.org/partners/official-partners/> (last visited Apr. 10, 2013).

<sup>73</sup> DiPeso & Pelikan, *supra* note 29, at 367.

<sup>74</sup> See, e.g., *Policies & Positions*, THE BLUE RIBBON COMMISSION, [http://www.sharetrails.org/about/policies/#irresponsible\\_advertising](http://www.sharetrails.org/about/policies/#irresponsible_advertising) (last visited Apr. 10, 2013) (explaining that ORV producers should follow Tread Lightly! principles in advertising the capabilities and responsible uses of their products).

<sup>75</sup> See, e.g., Clark L. Collins, *Respecting Private Property*, BLUERIBBON MAGAZINE, May 2003, <https://www.sharetrails.org/magazine/article/respecting-private-property> (stating that “[t]here are irresponsible recreationists in every user group” and that “the entire recreation community” should confront the problem); Brian Hawthorne, *Backcountry Ethics: It's Time for Zero Tolerance*, BLUERIBBON MAGAZINE, May 2005, <https://www.sharetrails.org/magazine/article/backcountry-ethics-its-time-zero-tolerance> (relating claims of irresponsible use at an ORV event and stating that responsible trail use is essential to the fight for more access); Mark Lester, *A Few Words to ATVers*, BLUERIBBON MAGAZINE, Feb. 2005, <https://www.sharetrails.org/magazine/article/few-words-atvers> (exhorting ATV users to apply pressure to their peers “to conform to higher standards of behavior” in order to counter the public image of ATV riders as irresponsible); Erica Rogers, *More Outlaw*

Though it may be true that the majority of ORV users are responsible and that the exact extent of noncompliance is exceedingly difficult to measure,<sup>76</sup> breakdowns of governing law are a persistent theme running throughout much of the discourse over ORV issues.

*B. Limited reach: the current legal regime for ORV regulation*

The USFS and BLM oversee much of the federal land affected by ORV use.<sup>77</sup> The USFS and BLM are both guided by multiple-use principles in relevant statutes.<sup>78</sup> The statutory context under which both agencies operate provides guidelines for how to approach land management but little in the way of mandates.<sup>79</sup>

From the 1920s onward, the USFS had generally promoted a balance between timber and water interests that it dubbed “multiple-use.” It was not until the Multiple-Use Sustained Yield Act of 1960 (MUSYA) that the agency was instructed to balance timber, watershed protection, recreation, range, and wildlife interests by congressional act.<sup>80</sup> The MUSYA definition of “multiple use” is not so much prescriptive as it is aspirational, stating that the USFS is to ensure the “harmonious and coordinated management of the various resources” of the national forests.<sup>81</sup> There is no in-depth treatment of recreation in the Act,<sup>82</sup> though the admonition to conduct extensive planning is clear.<sup>83</sup> In the years following its enactment, it became obvious that the USFS “had gone [primarily] into the business of tree-farming” notwithstanding the MUSYA, and Congress responded to this imbalance with the National Forest Management Act of 1976

---

*Problems in NY — Where Are the Registration Fees Going?*, BLUE RIBBON MAGAZINE, June 2002, <https://www.sharetrails.org/magazine/article/more-outlaw-problems-ny-where-are-registration-fees-going> (explaining that “disruptive and irresponsible behavior,” of which there had been complaints in New York, is an inappropriate response to how ORV vehicle registration fees are being spent when the public reputation of ORV users is important for dealings with government and land managers).

<sup>76</sup> See Lester, *supra* note 75.

<sup>77</sup> See CRIMMINS, *supra* note 51; FISHER ET AL., *supra* note 42, for Colorado and Utah user surveys showing that most ORV users in those states travel to USFS or BLM land for their motorized recreation. The structure of law pertinent to ORV use of public lands has been well-covered elsewhere and will be subject only to the passing treatment necessary to give context to the proposed solutions discussed subsequently. *E.g.*, Adams & McCool, *supra* note 9, at 58-72.

<sup>78</sup> George Cameron Coggins & Parthenia Blessing Evans, *Multiple Use, Sustained Yield Planning on the Public Lands*, 53 U. COLO. L. REV. 411, 422, 448 (1982). The concept of multiple-use “is neither widely understood nor consistently applied in practice.” *Id.* at 411-12.

<sup>79</sup> Adams & McCool, *supra* note 9, at 62.

<sup>80</sup> Multiple-Use Sustained-Yield Act of 1960, 16 U.S.C. §§ 528-531 (2006); Wilkinson, *supra* note 66, at 563-64.

<sup>81</sup> 16 U.S.C. § 531(a).

<sup>82</sup> *Id.* §§ 528-31; see also Adams & McCool, *supra* note 9, at 61 (explaining how the MUSYA fails to give substantive guidance concerning recreation).

<sup>83</sup> Coggins & Evans, *supra* note 78, at 422.

(NFMA).<sup>84</sup>

The NFMA, representing the current statutory structure under which the USFS operates,<sup>85</sup> was enacted in a new era of environmental consciousness.<sup>86</sup> Though it continued the multiple-use philosophy, the statute requires environmental assessments of forest management plans and the discussion of alternatives that may be more environmentally protective.<sup>87</sup> There is, again, no congressional direction as to recreation.<sup>88</sup>

The BLM operates under a substantially similar mandate.<sup>89</sup> Created from a hodgepodge of existing bureaus in the aftermath of World War II, the BLM had no permanent management guidance from Congress until the Federal Land Policy and Management Act of 1976 (FLPMA).<sup>90</sup> The FLPMA, similar to the NFMA, operates under a multiple-use principle and requires extensive planning procedures.<sup>91</sup> The statutory guidelines for both the USFS and BLM give substantial deference to the agencies so long as their decisions are informed by the required processes.

As a result, the White House, having determined that uncontrolled ORV use is a problem that needs addressing, issued more explicit instructions concerning ORVs to the USFS and BLM by way of Executive Orders 11,644 and 11,989.<sup>92</sup> Promulgated forty years ago, Executive Order 11,644 instructs the agencies to designate where ORVs are and are not allowed with the goal of minimizing environmental impact.<sup>93</sup> However, agency discretion has remained broad under the Order, and subsequent court action has demonstrated that the “minimization” standard would serve as another MUSYA-like exhortation rather than as an enforceable mandate.<sup>94</sup> Though Executive Order 11,989 allows the agencies to create presumptions of closure and commands the USFS and BLM to restrict access when ongoing or imminent “considerable adverse [environmental] effects” from ORV use are detected, the result in action was largely the same as 11,644 — “[the] measures provided agency discretion without effectively compelling action.”<sup>95</sup>

---

<sup>84</sup> *Id.* at 440.

<sup>85</sup> Laitos & Reiss, *supra* note 25, at 1098. USFS and BLM actions are additionally limited by ancillary statutes such as the Endangered Species Act and National Environmental Policy Act. Adams & McCool, *supra* note 9, at 59.

<sup>86</sup> Laitos & Reiss, *supra* note 25, at 1097.

<sup>87</sup> Wilkinson, *supra* note 66, at 565.

<sup>88</sup> Adams & McCool, *supra* note 9, at 61.

<sup>89</sup> *Id.*

<sup>90</sup> Coggins & Evans, *supra* note 78, at 447-48.

<sup>91</sup> Coggins & Evans, *supra* note 78, at 456-66; Laitos & Reiss, *supra* note 25, at 1098.

<sup>92</sup> Exec. Order No. 11,644, 37 Fed. Reg. 2,877 (Feb. 8, 1972); Exec. Order 11,989, 42 Fed. Reg. 26,959 (May 24, 1977).

<sup>93</sup> Adams & McCool, *supra* note 9, at 62.

<sup>94</sup> *Id.* at 63-64.

<sup>95</sup> Exec. Order No. 11,989, 42 Fed. Reg. 26,959 (May 25, 1977); Adams & McCool, *supra*

Litigation has proven equally unreliable in inducing agency action. The courts' shortcomings appear to stem from two main sources. First, judicial standards are very deferential to agency expertise and agency actions are typically upheld in cases where there are no procedural planning flaws.<sup>96</sup> Claims against the USFS or BLM must usually be brought under the auspices of the Administrative Procedure Act (APA), and thus that statute's substantial limitations on recovery have served to insulate the agencies from many challenges.<sup>97</sup>

For example, in *Norton v. Southern Utah Wilderness Alliance*,<sup>98</sup> the U.S. Supreme Court interpreted the APA to bar recovery for plaintiffs who asserted that the BLM failed to take enough action to limit ORV use, stating that "the only agency action that can be compelled under the APA is action legally required."<sup>99</sup> The Court further explained that "[t]he prospect of pervasive oversight by federal courts over the manner and pace of agency compliance with . . . congressional directives is not contemplated by the APA."<sup>100</sup>

The second reason that litigation is often ineffective to restrict ORV use also hampers statutory solutions: the agencies are terribly under-resourced. As Kahr aptly notes:

Many of these [legal] actions have been successful on the merits but they do not resolve the enforcement difficulties that land managing agencies are dealing with, because much of the most harmful ORV use is already formally illegal and courts cannot effectively direct land management agencies to become . . . better law enforcers.<sup>101</sup>

Even without alleged institutional entrenchment in timber harvest or mineral production, USFS and BLM personnel are expected to patrol vast amounts of land.<sup>102</sup> As the BLM has reported, "[ORV]-related funding and staffing have not kept pace with rising recreational use and the Bureau's need to improve

---

note 9, at 77; see also Kahr, *supra* note 6, at 97 ("Despite the relatively early recognition of the negative environmental impacts, federal agencies continue to struggle with increasing ORV use thirty-five years after the federal government's initial response.").

<sup>96</sup> Adams & McCool, *supra* note 9, at 66-67.

<sup>97</sup> *Id.*

<sup>98</sup> See *Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55 (2004).

<sup>99</sup> *Id.* at 63.

<sup>100</sup> *Id.* at 67.

<sup>101</sup> Kahr, *supra* note 6, at 97-98.

<sup>102</sup> See U.S. DEPT. OF THE INTERIOR, *supra* note 15, at 16 (explaining that public land is "often very remote" and that each BLM law enforcement official covers roughly 1.76 million acres on average); see, e.g., U.S. GENERAL ACCOUNTING OFFICE, FEDERAL LANDS: INFORMATION ON THE USE AND IMPACT OF OFF-HIGHWAY VEHICLES 72-73 (1995) (explaining that the Upper Lake Ranger District in California has one officer for ORV enforcement for its 249,327 acres, who issues between ten and twenty-five citations per year).

motorized [ORV] management.”<sup>103</sup> While some have argued that positive mandates restricting environmentally damaging individual behaviors would be ineffective because of their intrusiveness, ORV use suffers from precisely the opposite issue.<sup>104</sup> Enforcement is nearly nonexistent.

Though it is difficult to tell whether the root of the issue is calcified agency culture, inadequate resourcing, or both, the USFS and BLM have only begun concerted efforts at ORV management in the past twelve years.<sup>105</sup> The first step has been to limit ORV use to “existing trails,” a land designation that includes both official agency routes and user-created routes but excludes the creation of new trail — a somewhat dubious tack when cataloging user-created trails has already proven so difficult.<sup>106</sup> In defense of alleged non-compliers, in many cases, the agencies have yet to comprehensively and affirmatively designate where and how ORV use is restricted.<sup>107</sup> And some of the more recent articulations of agency policy show that the legal arm of ORV use management still has a long way to go.<sup>108</sup>

### C. Suggested reforms

There have been several suggestions for how to address this legal gap. For example, after their exhaustive review of the issues surrounding ORV use, John

---

<sup>103</sup> U.S. DEPT. OF THE INTERIOR, *supra* note 15, at 14.

<sup>104</sup> See Katrina Fischer Kuh, *When Government Intrudes: Regulating Individual Behaviors that Harm the Environment*, 61 DUKE L.J. 1111, 1119-20 (2012) (describing “the intrusion objection” to traditional behavioral mandates and offering “a more nuanced understanding of [this] obstacle”). In contrast to Professor Kuh, this Article endorses a norms-based prescription in the style of Professor Vandenbergh and others not because of a skepticism towards traditional mandates of themselves but rather by recognizing that traditional *enforcement* is nearly non-existent on public lands. See, e.g., Vandenbergh, *supra* note 18, at 598 (arguing that traditional command and control methods will be ineffective to regulate individuals because they would be overly expensive and intrusive). Arguments against traditional behavior modification, valid though they may be, are moot in the ORV context.

<sup>105</sup> Adams & McCool, *supra* note 9, at 85-86. Coggins and Evans take a decidedly dim view of the BLM in particular: “[the BLM] is seldom regarded as one of the better agencies of the federal government.” Coggins & Evans, *supra* note 78, at 446.

<sup>106</sup> Adams & McCool, *supra* note 9, at 87 n.188. Most land under USFS control operates under use standards at least this stringent, *id.*, and the BLM similarly limited ORV use on over half of its land as of 2006. *Id.* at 89.

<sup>107</sup> *Id.* at 90-91.

<sup>108</sup> Travel Management; Designated Routes and Areas for Motor Vehicle Use, 70 Fed. Reg. 68,264 (2005) (requiring but not implementing designation of areas that are open to ORV use); Vera Smith & Sarah Peters, *Forest Service Issues Long Awaiting Travel Management Directives*, WILDLANDS CPR (June 23, 2009), <http://www.wildlandscpr.org/policy-primer/forest-service-issues-long-awaited-travel-management-directives> (describing the many loopholes in the USFS’s new directives); see, e.g., U.S. DEP’T OF THE INTERIOR: BUREAU OF LAND MANAGEMENT, NATIONAL MANAGEMENT STRATEGY FOR MOTORIZED OFF-HIGHWAY VEHICLE USE ON PUBLIC LANDS (2001), available at <http://www.nplnews.com/library/ohv/ohv-plan-jan192001.pdf> (explaining that the Strategy is not a revision of regulations or a nationwide decision on where ORVs are allowed).

C. Adams and Stephen F. McCool, both conservation academics, give a list of ten items the agencies could undertake to improve their management of ORVs.<sup>109</sup> Their suggestions all lie squarely within the agencies' present authority, but they depend on both effective on-the-ground law enforcement and additional congressional appropriations.<sup>110</sup> But Adams and McCool do not stop with the USFS and BLM themselves; rather, they call upon Congress to enact new legislation to address "the difficult political decision of determining which recreationists will get the goods on multiple-use lands."<sup>111</sup>

Adams and McCool are not alone in focusing upon federal statutes in order to craft a solution. Professor Jan G. Laitos, with Rachael B. Reiss, goes one step further, arguing that not only is Congress the proper forum for the ORV issue, but also that the best statute would, in fact, be organized to resolve land use disputes by favoring non-motorized, low-impact recreation above other uses.<sup>112</sup> Professor Michael Blumm similarly wields public choice theory in a more general assault on the multiple-use principle, arguing that "the benefits of multiple use — its flexibility and its capability to adjust to changing conditions — will be outweighed by the effects of land manager capture by local commodity interests."<sup>113</sup> He concludes that the legislative paradigm should be altered to more explicitly protect all types of resources that the public lands have to offer.<sup>114</sup>

Others focus their attention on the operation of administrative law. Discussing American regulatory responses to environmental questions, Professor Barton Thompson compares the traditional command-and-control theory of rulemaking with partnership- and market-based solutions, concluding that a mixture of all three approaches is likely the best way to move forward.<sup>115</sup> Though they have shortcomings, Professor Thompson observes that particularly EPA partnerships have met with some success, and that this model allows cooperation between erstwhile competitors and can give local communities an effective voice.<sup>116</sup> Kahr is more specific in his recommendations, proposing a cooperative model of publicly managed trail access on privately owned land in tandem with efforts to revise ORV user norms to foster an ethos of stewardship.<sup>117</sup> He asserts that such

---

<sup>109</sup> Adams & McCool, *supra* note 9, at 105-09.

<sup>110</sup> *Id.* at 107, 109.

<sup>111</sup> *Id.* at 110.

<sup>112</sup> Laitos & Reiss, *supra* note 25, at 1121. Laitos and Reiss assert that the courts are already leaning towards favoring low-impact recreationists already. *Id.* at 1122.

<sup>113</sup> Michael C. Blumm, *Public Choice Theory and the Public Lands*, 18 HARV. ENVTL. L. REV. 405, 422 (1994).

<sup>114</sup> *Id.* at 430.

<sup>115</sup> Barton H. Thompson, Jr., Foreword, *The Search for Regulatory Alternatives*, 15 STAN. ENVTL. L.J. vii, xx-xxi (1996).

<sup>116</sup> *Id.* at xii-xiv.

<sup>117</sup> Kahr, *supra* note 6, at 100-06.



a shift in norms will come about through forcing ORV users to face the social costs of their activity, increasing enforcement of private exclusionary rights, and nurturing a “closed-unless-open” philosophy among ORV users.<sup>118</sup>

Will these suggested changes, if enacted, do anything to address noncompliant ORV use? Without substantially increased agency resources for law enforcement, there will be a persistent, michelangelean gap between the law’s reach and the ORV activity it seeks to control, no matter what a statute may say.<sup>119</sup> Thus, in an era of constrained agency capability, Kahr’s suggestion to focus on law and social norms theories rather than revising federal statutes seems the most promising: “users would internalize a responsible use norm, rendering it self-executing among a broad segment of the riding population.”<sup>120</sup> The psychological literature discussed in Part III below emphatically endorses solutions that focus on the ends of behavioral modification rather than the means of the legal regime.

### III. STICKY IDEAS AND COMPLIANCE

In the ORV context, where roadblocks in enforcement mean that messaging may be key to change behavior, psychology presents valuable insights. This Part will discuss several of them. The 2007 book by Chip and Dan Heath, *Made to Stick: Why Some Ideas Survive and Others Die*, accessibly summarizes psychological and real-world knowledge as to what makes a message effective. In discussing the Heaths’ work, this Part will drill deeper and review the compliance literature upon which *Made to Stick* partially relies, acknowledging how that literature aligns with law and social norms and Cultural Cognition scholarship and recognizing that any message hoping to shape ORV use will have to contend with the problem of noncompliance described above.

#### A. *Made to Stick*

The Heaths ask, “how do we nurture our ideas so they’ll succeed in the world?”<sup>121</sup> They define these successfully “sticky” ideas in the exact same manner that a regulator might define a successful message to the ORV community: “[b]y ‘stick,’ we mean that your ideas are understood and remembered, and have a lasting impact — they change your audience’s opinions

---

<sup>118</sup> *Id.* at 104-06.

<sup>119</sup> See *supra* note 110 and accompanying text for the assertion that any proposed solution depends on effective law enforcement to be successful. See *supra* note 101 and accompanying text for discussion of how unwanted ORV activity is quite often already illegal.

<sup>120</sup> Kahr, *supra* note 6, at 105. See *supra* note 49 for a discussion of an initiative in Colorado that was based on a similar conclusion that a motivational rather than deterrent message would be most effective at keeping ORV users on the trail.

<sup>121</sup> HEATH & HEATH, *supra* note 19, at 5.

or behavior.”<sup>122</sup> After considering the thinking in subjects as diverse as psychology, folklore, education research, political science, and business, the Heaths arrive at a common group of six attributes that make ideas more likely to stick: simplicity, unexpectedness, concreteness, credibility, emotions, and story-format.<sup>123</sup> This section reviews the Heaths’ research supporting these principles.

1. Simple – convey (only) what is most important

The first attribute of a sticky idea is that it is simple. Simplicity — “finding the core” — is also the most important step in crafting a sticky message, because it defines the real point the message is trying to convey.<sup>124</sup> The Heaths explain that arriving at simplicity involves cutting not only extraneous elements of a message but also those “ideas that may be really important but just aren’t *the most important* idea.”<sup>125</sup> There is a wealth of psychological evidence showing why stripping an idea down to its core can help its effectiveness.

A simple message helps people to make good choices in the face of uncertainty.<sup>126</sup> The Heaths turn to Professors Tversky and Shafir to demonstrate how this is so.<sup>127</sup> Tversky and Shafir questioned the uniform applicability of the “sure-thing principle” — that an actor who prefers choice *x* to choice *y* regardless of the known outcome of variable *z* will choose *x* over *y* even when the outcome of *z* is unknown.<sup>128</sup> Tversky and Shafir set out to demonstrate that instead, when the outcome of *z* is unknown, and the *reasons* for preferring choice *x* differ depending on the outcome of *z*, subjects act to reduce their uncertainty rather than choosing *x* as they rationally should under the sure-thing principle.<sup>129</sup> The results of their several empirical studies show that, true to their hypothesis, there is “a loss of acuity induced by uncertainty about an outcome when the reasons for choice differ depending on that outcome.”<sup>130</sup> This effect can be reduced by allowing the subject time to realize that the uncertainty they face should have no rational bearing on their choice.<sup>131</sup>

---

<sup>122</sup> *Id.* at 8.

<sup>123</sup> *Id.* at 15-18. The Heaths are careful not to claim that they have a silver bullet, stating that “[t]here is no ‘formula’ for a sticky idea.” *Id.* at 15.

<sup>124</sup> *Id.* at 28.

<sup>125</sup> *Id.*

<sup>126</sup> *Id.* at 37.

<sup>127</sup> *Id.* at 35-36.

<sup>128</sup> Amos Tversky & Eldar Shafir, *The Disjunction Effect in Choice Under Uncertainty*, 3 PSYCHOL. SCI. 305, 305 (1992).

<sup>129</sup> *Id.*

<sup>130</sup> *Id.* at 308.

<sup>131</sup> *Id.* at 309. The Heaths also discuss a subsequent study by Professor Shafir that he performed with Donald Redelmeier, M.D, which showed that the simple presence of choice can create the same disruptions as the uncertainty discussed above. HEATH & HEATH, *supra* note 19, at 36-37 (discussing Donald A. Redelmeier & Eldar Shafir, *Medical Decision Making in Situations that Offer Multiple*

Simple messages can effectively serve to reduce this disruptive uncertainty because of their ability to operate as markers for considerably more complex, higher-order concepts.<sup>132</sup> One of the most venerable, most depressing findings in psychology is that humans have the immediate memory to identify only about seven stimuli for any single variable.<sup>133</sup> These variables could be anything as diverse as tonal pitch, loudness, saltiness, or position on a number line. For each, subjects have a limited “channel capacity” above which they will begin to confuse inputs as they are asked to record what they have observed.<sup>134</sup> However, information “chunks” can house within themselves a much larger number of more discrete information bits, and adding variables to each individual stimulus will also increase information processing.<sup>135</sup>

In the context of memory, this concept manifests itself as schema — a person’s organization of his or her experiences into more manageable packages.<sup>136</sup> Thus the importance of pre-prepared, interchangeable themes in oral traditions, where memory plays a central role:

The theme of the young hero [itself] consists of themes, such as assembly, arrivals, departures, and disguising, that are used elsewhere in the epic tradition. In addition, the theme as a whole belongs to a family of related themes including return and rescue themes. The story of Telemachus fits the *Odyssey* because, in large part, it parallels and utilizes many of the same components as the story of Odysseus’s return to Ithaki.<sup>137</sup>

In the similar field of education, research shows that drawing on familiar concepts is useful to cement new ideas.<sup>138</sup> Sticky messages will take on the

---

*Alternatives*, 273 J. AM. MED. ASS’N 302 (1995).

<sup>132</sup> HEATH & HEATH, *supra* note 19, at 55-57.

<sup>133</sup> George A. Miller, *The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information*, 63 PSYCHOL. REV. 81, 90 (1956).

<sup>134</sup> *Id.* at 82-86. Though Miller explains that the phenomena have different mechanics, spans for immediate memory, “absolute judgment” (distinguishing between categories), and spans of attention are all limited to a ballpark range of seven stimuli. *Id.* 91.

<sup>135</sup> *Id.* at 93, 95.

<sup>136</sup> DAVID C. RUBIN, MEMORY IN ORAL TRADITIONS: THE COGNITIVE PSYCHOLOGY OF EPIC, BALLADS, AND COUNTING-OUT RHYMES 21 (1st ed. 1995) (quoting F.C. BARTLETT, REMEMBERING: A STUDY IN SOCIAL AND EXPERIMENTAL PSYCHOLOGY 201 (1932); *see also* HEATH & HEATH, *supra* note 19, at 55-56 (explaining that schemas are groups of general characteristics of a category consisting of information derived from memory).

<sup>137</sup> *Id.* at 18.

<sup>138</sup> *See, e.g.*, Richard E. Mayer, *Elaboration Techniques That Increase the Meaningfulness of Technical Text*, 72 J. EDUC. PSYCHOL. 770 (1980) (demonstrating that a file cabinet analogy helps to teach students the use of a computer program); *see also* Michael Erb & Wolfgang Grodd, *Mechanisms and Neural Basis of Object and Pattern Recognition: A Study with Chess Experts*, 139 J. EXP. PSYCHOL. GEN. 728, 729 (2010) (explaining that chess experts access knowledge chunks with regard to individual pieces, their function, and their typical relations to more efficiently evaluate the board).

aspects of a proverb: they are compact but profound.<sup>139</sup> All of the Heaths' remaining SUCCEs characteristics deal with how to deliver that proverb across to the audience.<sup>140</sup>

2. Unexpected — curiosity and mystery supply their own interest

Sticky ideas succeed at grabbing and holding listeners' attention. In this sense, the Heaths borrow heavily from psychological work studying curiosity.<sup>141</sup> Curiosity is described in some theories to be an aversive state, a feeling of tension that brings pleasure when resolved.<sup>142</sup> Curiosity is present when the subject focuses on a gap between her present state of knowledge and some desired state of greater knowledge.<sup>143</sup> It propels a message forward in the impetus it provides to close the gap.<sup>144</sup>

The gap explains Professor Robert Cialdini's findings. Professor Cialdini conducted a review of literature written by academics for a popular audience in preparing to write a book of his own.<sup>145</sup> He discovered that the most successful pieces, including the one that made him care that the Rings of Saturn are composed mostly of frozen dust, are written in the form of mystery stories.<sup>146</sup> Mysteries propel messages because they import a need for closure that exists independent of any personal relevance that the information might have.<sup>147</sup> Empirical studies in recent years have supported a positive link between feelings of uncertainty and the intensity of a subject's emotional response to stimuli.<sup>148</sup> By presenting new information in an unexpected format, the message can supply its own interest.<sup>149</sup>

---

<sup>139</sup> See HEATH & HEATH, *supra* note 19, at 62.

<sup>140</sup> *Id.* at 28.

<sup>141</sup> *Id.* at 80-82, 84-85.

<sup>142</sup> George Loewenstein, *The Psychology of Curiosity: A Review and Reinterpretation*, 116 PSYCHOL. BULL. 75, 81 (1994).

<sup>143</sup> *Id.* at 87.

<sup>144</sup> *Id.* at 88.

<sup>145</sup> Robert B. Cialdini, *What's the Best Secret Device for Engaging Student Interest? The Answer is in the Title*, 24 J. SOC. & CLINICAL PSYCHOL. 22, 22 (2005).

<sup>146</sup> *Id.* at 24; HEATH & HEATH, *supra* note 19, at 80-82.

<sup>147</sup> See Cialdini, *supra* note 146, at 25 (Mysteries are also effective message vessels because they are presented in the form of a story, which the Heaths also discuss. HEATH & HEATH, *supra* note 19, at Ch. 6).

<sup>148</sup> Yoav Bar-Anan et al., *The Feeling of Uncertainty Intensifies Affective Reactions*, 9 EMOTION 123, 126 (2009). The researchers are careful to caution that the mechanism by which curiosity intensifies both positive and negative emotions remains to be studied. *Id.*

<sup>149</sup> However, the Heaths caution the would-be messenger to avoid gimmickry, recalling the example a Super Bowl advertisement featuring a marching band, a pack of wolves, and an utterly forgettable product. See HEATH & HEATH, *supra* note 19, at 69-70.

3. Concrete — tangible imagery makes things easier to understand and retain

“Concrete ideas are more memorable.”<sup>150</sup> The Heaths do not take much time to define what exactly makes an idea more concrete,<sup>151</sup> but the psychological sources upon which they rely are instructive. David C. Rubin, in his work, *Memory in Oral Traditions*, links concreteness with imagery, asserting that the two go hand in hand in narrative storytelling.<sup>152</sup> In a brisk survey of psychological evidence that using verbs and specific language rather than prepositions and general language (e.g., “basket,” not “container”) facilitates recall, Rubin shows that imagery is effective even without visual cues because of the specificity it provides.<sup>153</sup>

In the education context, the Heaths reference work by Mark Sadoski, Ernest Goetz, and Maximo Rodriguez demonstrating that “concreteness was overwhelmingly the best predictor of overall comprehensibility, interest, and recall” when subjects were given different types of text to read and recount.<sup>154</sup> Concreteness was measured by comparing two texts on two different topics, grouped by text type.<sup>155</sup> An abstract, persuasive text read as follows:

Character cannot be summoned in a crisis if it has been squandered by years of compromise and excuses. The only testing ground for the heroic is the mundane. There is only one preparation for that great decision that can change a life. It is those hundreds of half conscious, self defining, seemingly insignificant decisions made in private.<sup>156</sup>

In contrast, a concrete, persuasive text contained the following language:

Think twice before buying another “convenience.” Grandmother’s kitchen had a pan, spoon, and a knife. It produced a Sunday dinner of roast chicken, potatoes, salad, vegetables, and apple pie. The kitchen of the 1990s contains a food processor, blender, laser-cut knife system, and a 20-piece cookware set that produces a Sunday dinner of microwave pizza.<sup>157</sup>

Similar juxtapositions were presented in expository, literary, and narrative

---

<sup>150</sup> *Id.* at 297.

<sup>151</sup> *See, e.g., id.* at 126-29 (recounting the struggles of corporate and religious leaders in reaching out to individuals rather than relying on demographic data to provide examples of making an idea concrete).

<sup>152</sup> RUBIN, *supra* note 136, at 56.

<sup>153</sup> *Id.* at 54-55.

<sup>154</sup> HEATH & HEATH, *supra* note 19, at 297-98; Mark Sadoski et al., *Engaging Texts: Effects of Concreteness on Comprehensibility, Interest, and Recall in Four Text Types*, 92 J. EDUC. PSYCHOL. 85, 85 (2000).

<sup>155</sup> Sadoski, *supra* note 155, at 87-88.

<sup>156</sup> *Id.* at 95.

<sup>157</sup> *Id.*

texts, and each text was also paired with either an abstract or a concrete title.<sup>158</sup> Though the magnitude of the results varied across text types, concreteness facilitated comprehension, interest, and memory for each text type.<sup>159</sup> The commonality with Rubin’s discussion gives a strong idea of the “concreteness” that makes an idea stick — it is the use of tangible objects, imagery, and action to make a point.<sup>160</sup>

#### 4. Credible — an influential idea is a believable idea

A credible idea depends on a credible source.<sup>161</sup> This sticky characteristic could be more accurately described as an extension of the “concreteness” factor in its focus on the credibility that details lend to a message.<sup>162</sup> The Heaths rely on a 1986 study by Jonathan Shedler and Melvin Manis that gave subjects differing accounts of a mother’s parenting ability in a mock custody proceeding, some of which accounts contained “vivid” (but legally neutral) details.<sup>163</sup> The subjects, perhaps tragically ignorant of relevance objections, responded favorably in recall and judgment to those arguments that contained the details.<sup>164</sup> Though it adds only limited information that the other factors do not already discuss,<sup>165</sup> the credibility factor is a reminder that a message must appear to come from some “wellspring[.]” of authority.<sup>166</sup>

<sup>158</sup> *Id.* at 87-88.

<sup>159</sup> *Id.* at 92. Interestingly, concreteness of title had a more limited effect, showing itself only for literary and concrete narrative text types. *Id.*

<sup>160</sup> See HEATH & HEATH, *supra* note 19, at 113-14 (explaining that experts fail to effectively convey messages to novices because they communicate without regard to their ability to think abstractly about their area of expertise); see also Richard E. Mayer, *Systematic Thinking Fostered by Illustrations in Scientific Text*, 81 J. EDUC. PSYCHOL. 240, 240 (1989) (discussing an experiment showing that labeled illustrations in brake system documentation fostered retention of explanatory information).

<sup>161</sup> See HEATH & HEATH, *supra* note 19, at 132-33 (explaining that people believe ideas that other trusted individuals such as parents and friends believe). For the purposes of influencing entrenched ORV use, the Heaths interestingly describe attempting to sway a hostile audience as “an uphill battle against a lifetime of personal learning and social relationships.” *Id.* at 133. However, by tapping conveying a message through a source that is authoritative in the minds of the audience, the speaker can overcome these barriers. *Id.* at 133-34.

<sup>162</sup> *Id.* at 137-41.

<sup>163</sup> *Id.* at 138-39; Jonathan Shedler & Melvin Manis, *Can the Availability Heuristic Explain Vividness Effects?*, 51 J. PERS. & SOC. PSYCHOL. 26, 27-28 (1986). The Heaths also make use of several anecdotal examples of credibility, most notably the story of medical researcher Barry Marshall, who overcame a lack of credentials to convince the scientific community that duodenal ulcers are bacterial in origin. HEATH & HEATH, *supra* note 19, at 130-32. He did so by drinking a cup of water filled with bacteria and treating himself for the resulting ulcer. *Id.* at 132.

<sup>164</sup> Shedler & Manis *supra* note 164, at 28.

<sup>165</sup> See *supra* Part III.A.3 for a discussion of how concrete details help an idea stick, and see *infra* notes 190-200 and accompanying text for a discussion of how a message is more effective when it comes from within one’s social group.

<sup>166</sup> HEATH & HEATH, *supra* note 19, at 163.

*Made to Stick* does not deal with legal scholarship, but the Cultural Cognition project provides some insights linking those wellsprings of authority to the emotional effects of social proof described below. Seeking to explain sharply divergent points of view on political issues that should be subject to empirical proof, Cultural Cognition is a theory that “cultural commitments are prior to factual beliefs on highly charged political issues.”<sup>167</sup> Individual evaluations of empirical evidence on issues like gun control or the death penalty are colored by the choice of whom to trust in processing opaque information, which itself is shaded by the individual’s idea of a good society.<sup>168</sup>

Thus, experimental evidence has revealed that no matter the amount or quality of empirical information available, a person’s worldview is a more reliable predictor of how they will view the evidence than other factors like race, gender, or political affiliation.<sup>169</sup> Here, Professor Kahan and Professor Braman arrive at an explanation of why certain experts are credited, and others are not, in a manner that effectively links the credibility and emotional components of sticky ideas. For a message to resonate and be credible, the speaker should align as thoroughly as possible with the listener.

##### 5. Emotional – resonant ideas compel individuals to act

The emotional component of a sticky idea is its spark plug.<sup>170</sup> It is also of primary importance in any discussion about shaping ORV use, because much of the available information shows that ORV users already know that they should stay on-trail; they just frequently choose not to.<sup>171</sup> A message to influence ORV users must find a way to access their emotions to motivate them, because “feelings inspire people to act.”<sup>172</sup>

The Heaths focus on the power of association and appeals to group interest.<sup>173</sup> By association, they mean a simple process: “the most basic way to make people care is to form an association between something they don’t yet care about and something they do care about.”<sup>174</sup> And to discern what a person cares about, the Heaths recognize that individuals often make decisions based on what is beneficial to their group rather than what is beneficial to their self-interest.<sup>175</sup>

---

<sup>167</sup> Kahan & Braman, *supra* note 23, at 150.

<sup>168</sup> *See id.* at 150-51.

<sup>169</sup> *Id.* at 158.

<sup>170</sup> *See* HEATH & HEATH, *supra* note 19, at 168-69 (“For people to take action, they have to care.”).

<sup>171</sup> *See supra* Part II.A.2.a for a discussion of the allegedly noncompliant contingent of ORV users and the central role it plays in debates over ORV use.

<sup>172</sup> HEATH & HEATH, *supra* note 19, at 169.

<sup>173</sup> *See id.* at 171-74, 189-91.

<sup>174</sup> *Id.* at 173.

<sup>175</sup> *Id.* at 189-90.

Since the problem of making ORV users *care* about staying on-trail looms larger than that of making them *knowledgeable* about staying on-trail, the academic bases for the emotional component deserve more detailed treatment.

The Heaths enthusiastically endorse Robert Cialdini's book, *Influence: The Psychology of Persuasion*.<sup>176</sup> Though it lacks the snappy SUCCEsS acronym, *Influence* nonetheless does for persuasion what *Made to Stick* does for stickiness — it presents the psychological literature to a lay audience in a readable package.<sup>177</sup> Cialdini lays out several factors that facilitate compliance with external stimuli, of which three are especially pertinent: (1) reciprocation, (2) commitment, and (3) social proof.<sup>178</sup>

Reciprocity is a basic tenet of human relations that is found in all cultures.<sup>179</sup> It signifies the obligation one feels to answer gratuity with gratuity.<sup>180</sup> A wealth of psychological studies support its existence. For example, one of Cialdini's own empirical explorations showed that compliance with a small favor (chaperoning children in juvenile detention on a trip to the zoo) increased significantly when subjects were first asked to perform a larger favor (working as an unpaid volunteer for children at a juvenile detention center for two hours per week for two years) — the “door-in-the-face” technique.<sup>181</sup> The results supported Cialdini's prediction that the reciprocal drive induced by the requester's first compromise — the move from the large favor to the small favor — would increase the likelihood of compliance with the second request.<sup>182</sup> The functioning of the reciprocity principle is a well-recognized means of inducing action in others.<sup>183</sup>

Eliciting commitment is another effective means of inducing compliance because it harnesses the power that consistency exerts on human decision making.<sup>184</sup> Cialdini canvasses some of the psychological research in this area,

---

<sup>176</sup> *Id.* at 302.

<sup>177</sup> *See generally* CIALDINI, *supra* note 22.

<sup>178</sup> *Id.*

<sup>179</sup> *Id.* at 18 (citing A.W. Gouldner, *The Norm of Reciprocity: A Preliminary Statement*, 25 AM. SOC. REV. 161 (1960)).

<sup>180</sup> *Id.* at 18-19.

<sup>181</sup> Robert B. Cialdini et al., *Reciprocal Concessions Procedure for Inducing Compliance: The Door-in-the-Face Technique*, 31 J. PERS. & SOC. PSYCHOL. 206, 208-09 (1975).

<sup>182</sup> *Id.* at 207, 209.

<sup>183</sup> *See, e.g.*, Ernst Fehr & Simon Gächter, *Fairness and Retaliation: The Economics of Reciprocity*, 14 J. ECON. PERSP. 159, 159 (2000) (“[T]here is considerable evidence that a substantial fraction of people behave according to this dictum: People repay gifts and take revenge even in interactions with complete strangers and even if it is costly for them and yields neither present nor future material rewards.”); *see also* Matthew 7:12 (King James) (“Therefore all things whatsoever ye would that men should do to you, do ye even so to them: for this is the law and the prophets.”); Jonathan J. Freedman et al., *Compliance Without Pressure: The Effect of Guilt*, 7 J. PERSONALITY & SOC. PSYCHOL. 117, 117 (1967) (inducing guilt in a subject increases compliance, primarily when compliance does not require interaction with the person towards whom the subject feels guilty).

<sup>184</sup> CIALDINI, *supra* note 22, at 67.



noting that the “foot-in-the-door” technique, the polar opposite of Cialdini’s own “door-in-the-face” technique described above, can be effective at inducing compliance for a large request when it is prefaced with a smaller, less onerous request.<sup>185</sup> The experimenters, psychologists Jonathan Freedman and Scott Fraser, whose experiments sought to elicit assistance with noncontroversial nonprofit groups,<sup>186</sup> surmised that this result obtained because the subjects might have changed their views about becoming active: “[o]nce [the subject] has agreed to a request, his attitude may change.”<sup>187</sup> Freedman and Fraser continue, “[h]e may become, in his own eyes, the kind of person who does this sort of thing, who agrees to requests made by strangers, who takes action on things he believes in, who cooperates with good causes.”<sup>188</sup> Other studies have borne out the positive effects that fostering commitment and involvement have on entrenching future action consistent with the committed position.<sup>189</sup>

Finally, the idea of social proof recognizes that commitment is easier to elicit when others are committed.<sup>190</sup> It is here where Cialdini and the Heaths tie

---

<sup>185</sup> CIALDINI, *supra* note 22, at 72-73; Jonathan J. Freedman & Scott C. Fraser, *Compliance without Pressure: The Foot-in-the-Door Technique*, 4 J. PERSONALITY & SOC. PSYCHOL. 195, 199-201 (1966) (a complied-with request to place a small sign on the subject’s front lawn supporting safe driving led to greatly increased compliance with a later request to place a large, poorly designed sign on the lawn).

<sup>186</sup> Freedman & Fraser, *supra* note 186, at 202.

<sup>187</sup> *Id.* at 201.

<sup>188</sup> *Id.*

<sup>189</sup> See, e.g., Jonathan L. Freedman, *Long-Term Behavioral Effects of Cognitive Dissonance*, 1 J. EXP. SOC. PSYCHOL. 145, 145, 149 (1965) (finding on a theory of cognitive dissonance that children given a mild, morality-based threat, “it is wrong to play with the robot,” in one setting are more likely to comply with the restriction at a later setting without any external influence than those given a stronger, consequences-based threat that added “[i]f you play with the robot I’ll be very angry and will have to do something about it”); Norbert L. Kerr & Robert J. MacCoun, *The Effects of Jury Size and Polling Method on the Process and Product of Jury Deliberation*, 48 J. PERSONALITY & SOC. PSYCHOL. 349, 349, 352 (1985) (explaining that experimental juries using an open, show-of-hands polling method were more likely to hang on the previously committed positions than juries using secret balloting, which fosters unanimity by avoiding open conflict); Albert Pepitone et al., *Change in Attractiveness of Forbidden Toys as a Function of Severity of Threat*, 3 J. EXP. SOC. PSYCHOL. 221, 221 (1967) (confirming the above study and surmising that an economic cost-benefit analysis is at work rather than cognitive dissonance); see also Marti Hope Gonzales & Elliot Aronson, *Using Social Cognition and Persuasion to Promote Energy Conservation: A Quasi-Experiment*, 18 J. APPLIED SOC. PSYCHOL. 1049, 1049, 1053, 1058 (1988) (finding that more individuals followed through with energy efficiency measures when encouraged to meaningfully participate during energy audits by, e.g., helping to take measurements or observe gaps in insulation). The Gonzales-Aronson study is compelling in that it not only incorporates psychological knowledge concerning commitment, it also attempted to incorporate vivid communication, personalization, and the framing of energy recommendations as losses as opposed to gains. *Id.* at 1049. Though lacking in the rigor of the laboratory, *id.* at 1054, the study is a fascinating example of psychological knowledge applied in a real-world setting. Chapter 3 of Cialdini’s book presents several of the above studies along with examples from settings as diverse as fraternity hazing and the experience of American prisoners-of-war during the Korean War. CIALDINI, *supra* note 22, at ch. 3.

<sup>190</sup> See CIALDINI, *supra* note 22, at 115 (stating that television executives use canned laughter

together most tightly.<sup>191</sup> As Cialdini explains, people look to those around them for guidance as to what is permissible.<sup>192</sup> Stanley Milgram and others elegantly demonstrated the principle in his appropriately titled “Note on the Drawing Power of Crowds of Different Size.”<sup>193</sup> In that article, the experimenters showed that as a “stimulus crowd,” observing a sixth-floor window from a city sidewalk, increased in size, so did the number of passersby who stopped and looked up with them.<sup>194</sup> This powerful device fluctuates with the degree to which the stimulus comes from a group with which the subject identifies, demonstrated in experiments manipulating altruistic actions like returning a wallet<sup>195</sup> or giving to a charity.<sup>196</sup> Psychological research instructs that the emotional aspects of social intercourse within a group can lead people to take action.<sup>197</sup>

Professor Kahan’s work surfaces again in this area, this time in his application of reciprocity as a rebuttal to the orthodoxy that individuals act as rational wealth-maximizers in questions of collective action.<sup>198</sup> Recognizing the same phenomena that Cialdini and the Heaths explain above, Kahan explains that people act as moral, emotional reciprocators rather than wealth-maximizers in situations as disparate as tax compliance, environmental nuisance, and intellectual property.<sup>199</sup> He ultimately concludes that fostering trust will lead to greater reciprocity, “mak[ing] the hope that citizens will be morally and emotionally committed to contribute to the common good more realistic.”<sup>200</sup>

---

because studies show that viewers laugh more when it is employed).

<sup>191</sup> Compare *id.* at ch. 4 (giving an account of how social proof — looking to peers for guidance on how to act — fosters compliance when the desired action corresponds with what the group deems appropriate), with HEATH & HEATH, *supra* note 19, at 189-91 (explaining that people often act on their principles as understood by the groups to which they belong or aspire to belong).

<sup>192</sup> CIALDINI, *supra* note 22, at 116.

<sup>193</sup> Stanley Milgram et al., *Note on the Drawing Power of Crowds of Different Size*, 13 J. PERSONALITY & SOC. PSYCHOL. 79, 79 (1969).

<sup>194</sup> *Id.* at 80-81; see also CIALDINI, *supra* note 22, at 120.

<sup>195</sup> Harvey A. Hornstein et al., *Influence of a Model’s Feeling About his Behavior and his Relevance as a Comparison Other on Observers’ Helping Behavior*, 10 J. PERSONALITY & SOC. PSYCHOL. 222, 222 (1968) (observing in a multi-layered empirical study that a finder’s return of a wallet is more likely to be influenced by a previous finder’s experience in returning the wallet if the previous finder is perceived to be similar to the finder).

<sup>196</sup> Robert E. Kraut, *Effects of Social Labeling on Giving to Charity*, 9 J. EXP. SOC. PSYCHOL. 551, 551 (1973) (finding that a subject is more likely to give to charity if they have been previously labeled as charitable by a prior canvasser).

<sup>197</sup> Kim Peters & Yoshihisa Kashima, *From Social Talk to Social Action: Shaping the Social Triad with Emotion Sharing*, 93 J. PERS. & SOC. PSYCHOL. 780, 786 (2007); see also CIALDINI, *supra* note 22, at ch. 5 (discussing the degree to which liking the requester affects rates of compliance); Jonah Berger & Chip Heath, *Who Drives Divergence? Identity Signaling, Outgroup Dissimilarity, and the Abandonment of Cultural Tastes*, 95 J. PERSONALITY & SOC. PSYCHOL. 593, 604 (2008) (presenting several studies showing that divergence from group tastes may be driven by a desire to signal identity with other groups).

<sup>198</sup> Kahan, *supra* note 23, at 71-72.

<sup>199</sup> *Id.* at 80-98.

<sup>200</sup> *Id.* at 103.

Kahan's work marches in lockstep with the Heaths and Cialdini, showing that trust is an essential part of an effective message. The emotional component of sticky ideas encompasses all of these findings—people act when they care, and they care when they owe a debt to someone else, to their idea of themselves, or to their group.

#### 6. Stories — narratives are more compelling than arguments

The final component that the Heaths found embedded in sticky ideas, considered here briefly, is that they are often told as stories.<sup>201</sup> Stories are effective because they naturally encompass most of the other characteristics described above.<sup>202</sup> They engage listeners — psychologists have found that audiences construct mental images constructing a space in their mind to visualize a story as they hear it.<sup>203</sup> In one psychological study, jurors interpreted the diffuse and fragmented evidence they received in a trial by building it into a storyboard.<sup>204</sup> One researcher has posited that perhaps stories are effective because belief rather than skepticism is humans' default state — “it's *easy* to get wrapped up in a story.”<sup>205</sup> So long as it is true to the core of the message, stories are a naturally sticky conduit for a message.<sup>206</sup>

The discussion on stories concludes the SUCCEs framework, which provides a roadmap for how to reach ORV users effectively. Citing examples from the real world and the suggestions of over forty years of psychological research, the Heaths explain that sticky ideas — ideas that seize and hold attention, that engage listeners and bring them to action — have certain characteristics that are detectable in a variety of contexts. Above all, they are simple in that they convey one core message. They seize listeners' attention and pique their continued interest by being unexpected. They are easily remembered because they are concrete. They are believed because they are credible. They induce action when they are emotional, and Cialdini's *Influence* shows that that

---

<sup>201</sup> HEATH & HEATH, *supra* note 19, at 18.

<sup>202</sup> *Id.* at 237. For this reason, this Article reviews the Heaths' storytelling component only briefly. Secondly, shaping ORV use is predominantly concerned with reaching ORV users out on the trail, where a short, punchy message is needed. *Cf. id.* at 237, 304-06 (explaining that the hardest part of conveying an idea in a story format is ensuring that it is simple).

<sup>203</sup> *Id.* at 209-10, 304-06 (reviewing the psychological research on how humans receive and interpret stories).

<sup>204</sup> *Id.* at 305 (discussing Nancy Pennington & Reid Hastie, *Explanation-based Decision Making: Effects of Memory Structure on Judgment*, 14 J. EXP. PSYCH. 521 (1988)).

<sup>205</sup> *Id.* at 306 (discussing RICHARD GERRIG, EXPERIENCING NARRATIVE WORLDS: ON THE PSYCHOLOGICAL ACTIVITIES OF READING (1988)).

<sup>206</sup> *Id.* at 237; see also Amy McQueen et al., *Understanding Narrative Effects: The Impact of Breast Cancer Survivor Stories on Message Processing, Attitudes, and Beliefs Among African American Women*, 30 HEALTH PSYCHOL. 674, 674 (2011) (citing HEATH & HEATH, *supra* note 19, and examining the positive effect of narrative materials in engendering cognitive and affective responses in listeners as opposed to expository material).

emotion is invoked when there is reciprocity, commitment, and social proof. Finally, sticky messages often come in the form of stories because listeners engage with them and because they naturally incorporate many of the other characteristics the Heaths describe. With these principles in mind, a compelling message for shaping ORV use can be constructed.

#### IV. DON'T TREAD ON ME: APPLYING THE PSYCHOLOGICAL LITERATURE TO ORV USE

This Part will apply the psychological conclusions outlined in Part III above to the problem of ORV use on public lands. It will do so in three sections. The first will evaluate the currently proposed solutions to the problem of legal control over ORV use — reworking federal statutes, partnership solutions, and revising user norms — against the backdrop of the psychological research, showing that those proposals that push local dialogue and focus on the characteristics of ORV users will be more effective than top-down proposals. The second section provides a brief analysis of the messaging from some of the current responsible-use campaigns, showing that they are properly motivated but can be improved. The third section will propose a theme — “Don’t Tread on Me” — explaining its promise under the roadmaps for sticky, influential messages proposed by the Heaths, Cialdini, and norms and Cultural Cognition scholars.

##### A. *Evaluating proposed solutions — local partnerships that focus on shaping ORV user norms are preferable to traditional law enforcement or revamping federal statutes*

Adams and McCool gave a comprehensive list of actions that the USFS and BLM could undertake in order to mitigate the problems ORV use causes on public lands, paired with a suggestion that Congress definitively state in a new statute the land uses that are to be preferred over others.<sup>207</sup> Laitos and Reiss and Blumm all agree that the multiple-use principle in federal statutes must be disregarded in order for public lands to be adequately protected.<sup>208</sup>

Statutory reform may be an important way to address the structural problems associated with the USFS and BLM, but it operates on a completely different plane than the interactions between the agencies and ORV users on the trail.<sup>209</sup> Congress of course must still rely on the USFS and BLM to serve as the bridge between the newly articulated statute and the high-school-educated, urban, white

---

<sup>207</sup> See *supra* notes 109-111, for a discussion of these proposals.

<sup>208</sup> See *supra* notes 112-114, for a discussion of these additional statutory proposals.

<sup>209</sup> Compare, e.g., Part III.A.4 (discussing the importance of an emotional connection in fostering action), with, e.g., *supra* notes 78-**Error! Bookmark not defined.** (discussing the statutory frameworks that define agency action on public lands).

males under age fifty that comprise the majority of ORV users.<sup>210</sup> Statutory on the ground also depends on additional resources being allotted to the agencies, and, contrary to the experience of the agencies thus far, effective law enforcement.<sup>211</sup> While these would all be welcome changes, they do not reflect the reality that the USFS and BLM officials presently face and essentially solve the problem by assuming it away.<sup>212</sup>

Public-private and federal-local partnerships paired with reshaping ORV user norms are encouraging in that they can be implemented consistently with the Heaths' prescriptions despite the present-day conditions frustrating agency action. The Heaths' concrete characteristic of sticky ideas emphasizes the particular over the abstract.<sup>213</sup> A regime that addresses issues in as granulated a manner as possible permits a discussion that is eminently concrete, focusing on particular ORV routes, forest roads, and streams rather than some aggregate concept of environmental degradation or soil compaction.<sup>214</sup> The credibility characteristic also underlines the importance of this sort of localized detail.<sup>215</sup> Finally, associating a message with the attributes and values of the listener-constituency is central to many of the psychological concepts outlined above, and these local models provide the best chance for that sort of interaction to take place.<sup>216</sup> In particular, the public-private/federal-local models would allow regulators and aligned interests to focus their resources on messaging that harnesses the powers of Cialdini's ideas of commitment and reciprocation by providing opportunities for exchanges of compromise and promises of action.<sup>217</sup>

Solutions along the lines of Kahr's approach explicitly recognize this potential.<sup>218</sup> With resources for traditional law enforcement unavailable, his

---

<sup>210</sup> See *supra* Part II.A.2.a, for a discussion of ORV user demographics.

<sup>211</sup> See *supra* note 110, for a discussion of these requirements. Even if increased law enforcement is possible, the psychological research reviewed in the field of compliance takes a dim view of these sorts of overt threats in inducing restrained ORV action in any but the most closely-monitored conditions. See *supra* note 190, for a discussion of psychological studies coming to the counterintuitive conclusion that more severe threats reduced rather than increased compliance in later settings where no threats were conveyed as compared to more mild threats.

<sup>212</sup> See *supra* notes 97-109 and accompanying text, for a discussion of the problems of enforcement that have plagued the USFS and BLM with regard to ORV use.

<sup>213</sup> See *supra* Part III.A.3, for a discussion of how concreteness helps ideas stick.

<sup>214</sup> See *supra* notes 116-19, for a discussion of partnership-based solutions that promise community input and greater cooperation among competing interests.

<sup>215</sup> See *supra* Part III.A.4, for a discussion of how credibility makes an idea more powerful and authoritative through the use of details.

<sup>216</sup> See *supra* Part III.A.5, for a discussion of the Heaths' emotional characteristic of sticky ideas, emphasizing the combined strength of association and group interest.

<sup>217</sup> See *supra* notes 177-84 and accompanying text, for a discussion of these psychological ideas and how they depend on the give-and-take of personal interaction between speaker and audience for their effectiveness. See *supra* notes 116-19 and accompanying text, for a discussion of the strength of partnership models in encouraging cooperation between opposing interests and giving voice to local groups.

<sup>218</sup> See *supra* notes 118, 121 and accompanying text, for a discussion of Kahr's proposed

proposal hopes to fill the gap by fostering a “self-executing” on-trail norm.<sup>219</sup> Indeed, he refers to the promise of Professor McAdams’s work on social norms and Professor Kahan’s work in norms modification.<sup>220</sup> However, while Kahr focuses on an esteem economy within the ORV user community supporting restrained use, his account is incomplete for failing to specifically describe what should be conveyed to ORV users.<sup>221</sup> The psychological literature underwrites Kahr’s self-regulating ORV user community, but it goes further than that, giving suggestions for what messaging would be required to make that community grow.

*B. Evaluating current messaging — messages rightly focus on motivating ORV users but can be revised*

There are some ongoing ORV outreach efforts using exhortative and educational messaging in a partnership context, but the psychological literature shows that each is not as effectively crafted as it can be. Tread Lightly! provides a broad range of communications programs.<sup>222</sup> They range from a cartoon squirrel geared towards youth education to a coordinated campaign based on the slogan, “Respected Access is Open Access.”<sup>223</sup> The Respected Access campaign website explains that “responsible behavior leads to continued access,” and that “this message resonates in the hearts and minds of the entire outdoor recreation community.”<sup>224</sup>

It is true that this message speaks to the central ORV user interest in continued access, but the campaign carries with it a veiled threat that suggests supine capitulation: ride responsibly, because ORV users are at the mercy of governmental actors and landowners.<sup>225</sup> Cialdini’s review of reciprocity and commitment shows that a sword of Damocles is not the most effective means of inducing compliance, especially when it is far from guaranteed to fall.<sup>226</sup>

---

solution.

<sup>219</sup> See *supra* notes 101-103, 121, for a discussion of the constrained resources under which the USFS and BLM operate and Kahr’s subsequent proposal to shape user norms to reduce the need for traditional law enforcement on public lands.

<sup>220</sup> Kahr, *supra* note 6, at 104 n.164, 105 n.166.

<sup>221</sup> See *supra* note 118 and accompanying text, for a discussion of Kahr’s proposal.

<sup>222</sup> See *supra* note 71 and accompanying text, for a discussion of the Tread Lightly! organization.

<sup>223</sup> *Youth Outreach Kit*, TREAD LIGHTLY!, <http://treadlightly.org/education/teaching-materials/> (last visited Apr. 10, 2013); *Overview of Respected Access*, RESPECTED ACCESS IS OPEN ACCESS, <http://www.respectedaccess.org/> (last visited May 5, 2012).

<sup>224</sup> *Overview of Respected Access*, *supra* note 224.

<sup>225</sup> Cf. FRUEH, *supra* note 49, at 5-6 (evaluating other Tread Lightly! slogans as “not-so-subtle threat[s] that public lands users will lose access to their favorite areas unless they undertake the responsibility to promote responsible use”).

<sup>226</sup> See *supra* notes 179-90 and accompanying text for a discussion of Cialdini’s presentation of the psychological concepts of reciprocity and commitment. Most relevant to the Respected Access

The Stay The Trail Colorado campaign website links state pride with trail behavior, telling visitors that “In Colorado, We Stay The Trail.”<sup>227</sup> The approach is promising because it follows the Heaths’ advice of attempting to link something ORV users care about — their state — with something that they (presumably) do not yet care about — staying on-trail.<sup>228</sup> It seeks identification with the targeted user group, accompanied by a polite, straightforward admonition. It is simple, leaving aside impassioned, technical arguments as to trail access and environmental data, but it is not unexpected.<sup>229</sup> Although research has not yielded any indication as to the success of the Stay The Trail campaign, if noncompliance is a real issue, and ORV users ride in part because of the high-adrenaline thrill, a message with more edge would be a better route to engaging the target audience.<sup>230</sup>

### C. *Don't Tread on Me*

Given the incompleteness of these various extant solutions, I propose a new, national, strategy to discourage harmful off-road use in conjunction with evolving agency action. Those that seek to shape ORV use should base their messaging campaign on the theme, “Don’t Tread On Me.” It faithfully incorporates many parts of the SUCCEs framework. Above all, Don’t Tread on Me is simple, unexpected, concrete, and emotional. When properly promulgated in the partnership atmosphere, where personal interaction and negotiated give-and-take are available to foster commitment, reciprocity, (and to an extent, credibility), Don’t Tread on Me has the potential to meaningfully influence the ORV user community.<sup>231</sup>

---

campaign are the studies conducted concerning mild and severe threats given to a child admonished not to play with a toy, finding that children were more likely to internalize the “don’t play with the robot” ethic when it was presented as a moral choice (“it is wrong to play with the robot”) rather than an overt threat (“[i]f you play with the robot I’ll be very angry and will have to do something about it”). Freedman & Fraser, *supra* note 186, at 145, 149. The enforcement gap on public lands also highlights the weakness of the threat in this message, showing that it fails the Heaths’ test of credibility. See *supra* notes 102-05 for a discussion of problems of enforcement on public lands, and see *supra* Part III.A.4 for a discussion of the credibility characteristic of sticky ideas.

<sup>227</sup> STAY THE TRAIL COLORADO, OFF-HIGHWAY GUIDELINES FOR MOTORIZED VEHICLES 1 (2009), available at <http://staythetrail.org/media/brochures/dl.php?key=kywwtb&t=view>.

<sup>228</sup> See *supra* notes 174-76,175 for a discussion of how association and association with group interests can be key to making listeners care about an idea. See *supra* note 49 and accompanying text for a discussion of Colorado ORV users’ pride in their home state.

<sup>229</sup> See *supra* Part III.A.2, for a discussion of the unexpectedness characteristic of stick ideas and its importance in grabbing listeners’ attention.

<sup>230</sup> See *supra* note 62 and accompanying text, for a discussion of how noncompliers are unlikely to respond to calls to good etiquette. Cf. HEATH & HEATH, *supra* note 19, at 196 (describing the “Don’t Mess with Texas” anti-litter campaign and how it was designed to reach an anti-authoritarian demographic with whom asking “please” would be ineffective).

<sup>231</sup> See *supra* notes 213-18, for a discussion of the promise of partnership models in providing a forum in which psychologically-informed messaging can work effectively.

Don't Tread on Me is simple. It conveys the core message — that ORV users should remain on-trail — while leaving aside the more complex, charged arguments for why they should do so.<sup>232</sup> By omitting all explicit reference to environmental impacts and access disputes, Don't Tread on Me gets straight to the point without attempting to engage in a counterproductive clash of ideas in which ORV users are already likely to have a well-guarded opinion.<sup>233</sup>

Don't Tread on Me also makes full use of the schemas that the Heaths note are key to the power of simple messages.<sup>234</sup> The catchphrase calls to mind revolutionary-era patriotism and the symbol of the coiled snake, invoking both the pride of place that some surveyed ORV users exhibit and a subtle demand to put the land before the person.<sup>235</sup> It carries connotations of defiance and independence within its condensed package, two themes that would resonate well within the ORV community.<sup>236</sup> It is short but profound.<sup>237</sup>

In the ORV context, Don't Tread on Me is unexpected. While messaging in the form of road signage or advertisements cannot feasibly tell a mystery story, Don't Tread on Me harnesses the power of curiosity from its simplicity and from its placement among other ORV messaging like the Respected Access and Stay The Trail campaigns.<sup>238</sup> It leaves much of its most powerful information implied but unsaid.<sup>239</sup> Other ORV programs make use of veiled closure threats or clinical admonitions to stay on-trail; a symbol of rebellion in the form of a coiled snake could not be more different in comparison.<sup>240</sup>

---

<sup>232</sup> See *supra* note 126 and accompanying text, describing how a simple idea should leave out even important details when those details are not *the* most important concept to communicate.

<sup>233</sup> See *supra* notes 198-200, for a discussion of the cultural cognitive explanation of why highly charged empirical disputes can be so hard to resolve.

<sup>234</sup> See *supra* notes 1323-140 and accompanying text, for a discussion of how simple, sticky ideas serve as placeholders for more complex themes and memories.

<sup>235</sup> See *supra* note 49 and accompanying text, for a discussion of Colorado ORV users and their pride in their state. The history of the Gadsden flag during the revolutionary period, with its "Don't Tread on Me" motto and iconic coiled snake, is given interesting treatment in *The Flag of the United States* by Frederick C. Hicks. FREDERICK C. HICKS, *THE FLAG OF THE UNITED STATES* 66-80 (1918); see also, GAO Report, *supra* note 10, at 24 (stating that the BLM Phoenix District has met success in reducing vandalism of ORV route signs by placing American flags on them).

<sup>236</sup> See *supra* notes 59-66 and accompanying text, for a discussion of how ORV users often prefer breaking new trail and are alleged to leave established trail routes even with the knowledge that they should not do so.

<sup>237</sup> See *supra* note 140 and accompanying text, for an explanation of how a simple, sticky idea takes on these characteristics of a proverb.

<sup>238</sup> See *supra* Part III.A.2, for a discussion of the importance of curiosity and the effectiveness of mystery stories in crafting an unexpected message, which helps to supply interest.

<sup>239</sup> See *supra* notes 233-38 and accompanying text, for a discussion of how Don't Tread on Me conjures themes that its words do not explicitly state.

<sup>240</sup> See HICKS, *supra* note 2356, at 66 (providing an image of the Gadsden flag). See *supra* Part IV.B, for a discussion of current messages to ORV users, their laudable characteristics, and how they threaten trail closures or politely request that riders stay on-trail. Though Don't Tread on Me and the coiled snake are ominous and clearly threatening, this form of aggression can be distinguished from



Though it sacrifices some specificity in its simplicity, Don't Tread on Me is concrete in its wording and in the schemas it invokes. The imagery of the coiled snake provides a readymade logo and, together with the slogan, connotes a tangible sense of potential energy.<sup>241</sup> This is doubly so when the entire theme of the Gadsden flag is associated with anti-authoritarian activism and military exploits.<sup>242</sup> Through its association with patriotism and its punchy use of language, Don't Tread on Me accesses a bank of memory in the exact way that the Heaths instruct.<sup>243</sup>

Most of all, Don't Tread on Me is emotional, harnessing the power of social proof by aligning with the values of the ORV community. ORV users tend to have an enhanced appreciation for the outdoors.<sup>244</sup> Evidence suggests that many take great pride in where they are from.<sup>245</sup> And most importantly, the entire phenomenon of ORV use is marked by the individualist's search for independence.<sup>246</sup>

The principle of social proof, that people look to their peers to guide their actions, depends heavily on whether a message is perceived to come from within the group.<sup>247</sup> As a symbol and a message, Don't Tread on Me starts with a close link to the origins of the United States and love of country, concepts that would be right at home in the ORV user community.<sup>248</sup> Though it could be said that knowledge of revolutionary history is not as endemic as it once was, and it is doubtful that even many highly educated Americans could describe the clouded origins of the Gadsden flag, the symbol is infused with a sense of defiant independence in contemporary life that stands on its own even absent historical referents. Don't Tread on Me's powerful schemas can demonstrate that stewardship of the land flows naturally from patriotism and an individualist spirit.

---

the Respected Access campaign's threat of trail closure in that it takes no risks with its legitimacy by threatening specific actions that it may not be able to back up. See *supra* notes 225-226, for a discussion of the Respected Access campaign and how its threat of trail closures may be counterproductive if it cannot be credibly enforced.

<sup>241</sup> See HICKS, *supra* note 236, at 69 (quoting the journal of the South Carolina Continental Congress describing the snake "in the attitude of going to strike").

<sup>242</sup> See *id.* at 66-80 (giving a history of the Gadsden flag, including a description of its symbolism to revolutionaries and of its involvement in several military actions).

<sup>243</sup> See *supra* Part III.A.3, for a discussion of how using tangible imagery and active language makes an idea more interesting and more memorable.

<sup>244</sup> See CORDELL ET AL., *supra* note 8, at 41 (finding in a survey that "[ORV] users are more active in every single recreation activity relative to the general U.S. population age 16 and older").

<sup>245</sup> See *supra* note 49 and accompanying text, for a discussion of Colorado ORV users and their pride in their state.

<sup>246</sup> See *supra* notes 58-61, for a discussion of how ORV use is characterized by the desire to break out on one's own.

<sup>247</sup> See *supra* notes 191-195, for a review of the workings of the social proof principle.

<sup>248</sup> See HICKS, *supra* note 236, at 66 (giving a history of the Gadsden flag, including a description of its symbolism to revolutionaries and of its involvement in several military actions).

It should also be said that Don't Tread on Me is vulnerable to the same potential pitfalls as other norms- and Cultural Cognition-based solutions. It is unsettling to think of government in the business of psychological meddling, harnessing the corrosive in-group/out-group dynamics that reciprocity theory implies.<sup>249</sup> And the insurgent use of delicate (or occult) social norms to shape other equally elusive social norms is an inherently uphill battle given the self-perpetuating nature of the phenomenon and the frequent absence of any social contact at all on public lands.<sup>250</sup>

These issues should lend pause, but they should not be fatal to a pilot program to test the efficacy of the Don't Tread on Me message. The functional difficulties simply describe the hurdles that a message intended to bridge social norms will need to be crafted to overcome. The challenge and payoff of this sort of solution lie in finding a commonality between two previously disparate social groups and showing those groups their common interest.<sup>251</sup> By contrast, the image of government as psychiatrist, toying with the minds of its citizenry, both exaggerates and ignores the role of government. Professor Sunstein has answered that "changing norms might be the best way to improve social well-being[,] . . . that government deserves to have, and in any case inevitably does have, a large role in norm management," and that "norm management is an important strategy for accomplishing the objectives of law."<sup>252</sup> Government has always been designed to affect the cost of individual actions by manipulating meaning.<sup>253</sup> Though not without its potential drawbacks, Don't Tread on Me holds promise as a way to shape ORV use without resort to traditional — and unavailable — methods of law enforcement.

Don't Tread on Me, presented through a partnership-based model, can bridge

---

<sup>249</sup> See Dan M. Kahan, *Signaling or Reciprocating? A Response to Eric Posner's Law and Social Norms*, 36 U. RICH. L. REV. 367, 384 (2002) ("The anxiety that the self-conscious regulation of social norms will infuse our political life with divisive 'insider' – 'outsider' distinctions furnishes the major source of opposition to the social norm project, both within and outside the academy.").

<sup>250</sup> See, e.g., Kahr, *supra* note 6, at 106 n.173 (recognizing the problem of developing norms among loose-knit groups and surveying literature that addresses how to solve it); Michael P. Vandenbergh, *Order Without Social Norms: How Personal Norm Activation Can Protect the Environment*, 99 NW. U. L. REV. 1101, 1105-06 (2005) (claiming that "[a] profoundly pessimistic conclusion lies at the core of recent environmental scholarship regarding behavior change in . . . negative-payoff, loose-knit group situations" because these scenarios benefit from neither self-interest nor "social sanctions" and arguing that activating "personal norms" could provide a solution).

<sup>251</sup> See, e.g., Kahan, *supra* note 16, at 1513 (describing church-police alliances as an example of reciprocity theory at work and arguing that these partnerships, signifying "a dramatic reorientation of the politics of law enforcement," deserve credit for drops in crime rates in recent years).

<sup>252</sup> Sunstein, *supra* note 16, at 907. Professor Sunstein explains that "[n]orms can tax or subsidize choice. Collective action — in the form of information campaigns, persuasion, economic incentives, or legal coercion — may be necessary to enable people to change norms that they do not like." *Id.* at 910.

<sup>253</sup> *Id.* at 913.

the gap between the ORV user community and those seeking to restrain ORV use to existing trails. It enjoys many of the characteristics of sticky ideas that Chip and Dan Heath explore in *Made to Stick*. It is simple, eschewing explanation for exhortation and containing a palate of powerful schemas. It is unexpected in its application to ORV use and in juxtaposition with other ORV responsible-use initiatives. It is concrete in the power of its phrasing and the poignancy of its imagery. Finally, it is emotional, tapping into the ethics of independence, defiance, and love of the land that would resonate with a broad group of ORV users, utilizing the power of social proof. Partnerships can bring ORV advocacy groups into the effort, ensuring that the message comes from within and that the principles of reciprocation and commitment are given free reign. Carefully crafted, Don't Tread on Me can become a sticky rallying cry to shape ORV use.

## V. CONCLUSION

Off-road vehicle use on public lands presents a vexing legal problem. ORV use has grown quickly since the 1960s, compounding environmental impacts and the clashes between the ORV user community, other recreationists, and landowners. Noncompliance with restrictions to stay on-trail is a theme running through much of the discourse. The USFS and BLM have been slow to address the issues of expanded ORV use, plagued by thinly spread resources and ineffective law enforcement. Faced with these shortcomings, if the need to restrict ORV use is accepted, a possible solution relies not on reworking statutory mandates but rather on partnering with ORV groups and other local interests to shape an on-trail ORV user norm through the theme, "Don't Tread on Me."

Psychological literature and Cultural Cognition scholarship endorse this solution. Chip and Dan Heath explain that naturally sticky ideas are often simple, unexpected, concrete, credible, emotional stories. Don't Tread on Me can check five of these six boxes. Professor Cialdini and the Cultural Cognition project show that compliance can be induced by reciprocity, commitment, and social proof, all of which are possible in a partnership model using the Don't Tread on Me message. In an environment of increasing vitriol, alleged noncompliance, and ineffective law enforcement, this sort of approach can demonstrate that traditional, top-down models are only one method of behavioral modification.