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# The Dump: A Visual Exploration of Illegal Dumping on Public Lands in Rural America

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This is an invited article.

#### Abstract

This study examines a commonly overlooked form of criminal activity in the countryside – the act of illegally dumping piles of waste materials onto public lands. After a visual examination of the various types of debris that are commonly dumped in these areas, consideration is given to the attitudes, motives and rationalizations that lead to the act of dumping. This study attempts to contextualize this activity within the framework of environmental sociology, emphasizing how attitudes about the natural environment, but also how the physical environment itself, can affect the propensity to dump. This study employs the more specific and quantifiable activity of illegal dumping piles of debris onto public lands in order to more clearly distinguish this activity from similar or related criminal enterprises that occur in rural America; however, it is important to note that the deviant element of this activity is central to the investigation. More specifically, the extent to which this criminal activity is viewed (by either the perpetrator or the community) as deviant has bearing on whether the activity is discouraged, whether penalties or alternatives are provided, the extent and frequency of this activity and, arguably, whether or not illegal dumping occurs in the first place. Finally, solutions to the problems posed by illegal dumping are considered in terms of wiser public policy informed by these social scientific findings.

#### Introduction

"What people do about their ecology depends on what they think about themselves in relation to things around them."

-Lynn White

Conceptualizing rural deviance is problematic for a number of reasons. First, the terms themselves defy objective boundaries. What is "rural" and what is "deviance"? When we think of rural America, are we referring to towns with a population of less than 50,000 or 10,000? Are we including sparsely populated areas, such as suburbs, that are surrounded by larger, more urban environments? Or are we restricting our considerations to the more strictly defined and isolated hinterlands? With respect to the notion of deviance, are we employing an objective criterion, such as law-breaking behavior, or are we casting our conceptual net more widely to include any action that is considered undesirable by the mainstream audience that is privy to it? Ostensibly, taking a cow to slaughter for the purpose of consumption is quite different than killing a stray cat for the entertainment value of it. But both these activities can be considered deviant, or normal, depending on your point of view. Deviance is relative to the group that defines it. As such, scholarly work in the field of rural deviance must draw clear lines in the conceptual sand. For rural sociologists attempting to provide general conclusions about rural life, our terms must be grounded.

Another analytical obstacle is inherent in the notion of rural deviance itself. To consider rural deviance is to assume that the phenomenon is unique from deviance in other environmental contexts. For example, in researching rural deviance we make an inherent assumption that it is distinct from urban deviance in important, tangible, and measurable ways. Of course, it is easy to recognize the behavioral differences between the two. For example, a territorial dispute in the ghetto over a lucrative street corner where drugs are dealt—resulting in a criminal assault or homicide—is an obviously different activity than, say, poaching on private land. But are these activities distinct in terms of motivation, incentive, or rationale? Furthermore, and perhaps more interestingly, are these distinctly deviant activities unique from one another because of the physical and social space in which they occur? To what extent does the physical and/or social environment influence the kind of criminal behavior that occurs, and how or why it occurs? Rural sociologists, environmental criminologists, and others who study deviant or criminal behavior must always be concerned with the interactive effects between both society and the environment, including the physical and/or geographical context in which this behavior takes place. That is, we must consider not just the activity that occurs in rural spaces, but how various rural environments affect or otherwise inform us about the activities that we observe. To the extent that we are all products of our environment, we should not overlook the physical environment's role in shaping both our attitudes and behaviors. Deviant and criminal behavior in rural America, then, is best understood in this interactive, analytical context.

This study examines a commonly overlooked form of criminal activity in the countryside – the act of illegally dumping piles of waste materials onto public lands. After a visual examination of the various types of debris that are commonly dumped in these areas, consideration is given to the attitudes, motives and rationalizations that lead to the act of dumping. This study attempts to contextualize this activity within the framework of environmental sociology (Hannigan 1995<sup>1</sup>), emphasizing how attitudes about the natural environment—but also how the physical

environment itself—can affect the propensity to dump. This study employs the more specific and quantifiable activity of rural dumping to more clearly distinguish this activity from similar or related criminal enterprises that occur in rural America; however, it is important to note that the deviant element of this activity is central to the investigation. More specifically, the extent to which this criminal activity is viewed (by either the perpetrator or the community) as deviant has bearing on whether the activity is discouraged, whether penalties or alternatives are provided, the extent and frequency of this activity and, arguably, whether or not illegal dumping occurs in the first place. Finally, solutions to the problems posed by illegal dumping are considered in terms of wiser public policy informed by these social scientific findings.

#### **Garbology: The Science of Trash**

The scientific study of trash is commonly called "garbology", a method of examining waste materials that was introduced by William Rathje at the University of Arizona in 1987 (Rathje  $1992^2$ ). Although the primary intent of this practice is to determine certain environmental effects that hazardous materials in our landfills pose over long periods of time, it is also a procedure that has been used to illuminate social life by means of examining more closely what we discard as a society. Ostensibly, a more accurate picture of what we throw away can provide better insight into how we live and what we value as a consumer society. As Scanlan so eloquently states in his work, *On Garbage*,

"if we look for connections amongst the variety of hidden, forgotten, thrown away, and residual phenomena that attend life at all times (as the background against which we make the world) we might see this habit of separating the valuable from the worthless within a whole tradition of Western ways of thinking about the world, and that rather than providing simply the evidence for some kind of contemporary environmental problem, 'garbage' (in the metaphorical sense of the detached remainder of the things we value) is everywhere. Indeed our separation from it is the very thing that makes something like a culture possible"  $(2005, p. 8-9^{3})$ .

From this perspective, we can consider our wilderness refuge as a cultural statement, a statement about both refuge *and* wilderness. In some ways, it can tell a story about cultural attitudes and values regarding our consumption of materials objects, offering insight into what we deem worthless. But it may also shed light on our values regarding nature, based on how we engage it. In this light, perhaps we can derive some general conclusions about the cultural logic behind the act of loading up a pile of trash into the back of a pick-up truck and then discreetly dumping it onto open space when nobody is looking. Is there a cultural imperative that is served when we do this? Is it possible that the urge to rid ourselves of excess waste is so strong because we do not want to cope with the realities of what it says about us as materialistic individuals? Can this urge be so strong that some are compelled to remove the evidence from sight by any means necessary? Is out of sight *in* our minds, or are we just too ignorant, lazy or busy to consider more appropriate means of disposing our excesses? Or, rather, does the act of illegally dumping point more to a society divorced from nature itself? Is this imperative grounded in a land ethic that views nature as an appropriate space to create wasteland for this human excess?

Cultural imperatives aside, a primary aim of this study is at least to document what kinds of material are being abandoned as trash. Since no other scientific study on illegal dumping onto public lands has been done, this study first seeks to document what is out there through photographic evidence. Visual representations of this common criminal enterprise offer a clearer picture of the different types of piles and can offer some insight into the act itself, which appears to be varied in terms of who is involved and for what specific purposes. For whatever reasons, the observations made here represent a true, modern day "tragedy of the commons" (Hardin 1988<sup>4</sup>).

#### **Methods**

Because the criminal nature of this activity dissuades illegal dumpers from participating in a formal survey, or from providing honest answers regarding their involvement, motives, and/or rationales for illegal dumping, the research design employed relies heavily on visual data. In choosing photographic evidence of this particular activity, an assumption has been made that a reflexive, subjective interpretation of images is the best means by which to understand the nature of rural dumping. That is, it is assumed that visual sociology—a subjective and ethnographic approach—provides the best means by which we can deduce the reasons for illegal dumping, and offers a more direct and profound look at exactly what is being abandoned as trash on our public lands.

As a research strategy, visual ethnography has an intriguing history in the social sciences and as an interdisciplinary effort (Pink 2001<sup>5</sup>; Rogoff 1998<sup>6</sup>). For social scientists, however, the approach has been somewhat contentious, as researchers have debated the degree to which this approach can provide an objective lens of reality (Becker 1986, Becker 1995, Collier and Collier  $1986^{\circ}$ ; Gold  $1997^{\circ}$ ; McGuigan  $1997^{\circ}$ ; Pink  $2001^{\circ}$ ). While it can be argued that photographs taken of sociological phenomena are tainted by the photographer's own biases, it can also be argued that a reflexive approach, one that recognizes and grounds the observer's biases in the representative images, can provide a similarly accurate depiction of reality. This stance is based in the notion that reality cannot be conceived of in the objective sense, but only through the lens of the observer. Knowledge obtained through representations (like a photograph), then, offers as much truth about reality as traditional text, since all knowledge must pass through subjective filters of the researcher in their dissemination of "facts". In fact, the notion that objective truth is not only unobtainable through standard scientific procedures, but that it can only be understood as a manifestation of structured, hierarchical systems of reality production (such as the media) is a general idea posited by many within the interdisciplinary traditions of postmodernism (Lyotard 1993<sup>13</sup>), deconstructionism (Derrida 1985<sup>14</sup>), and visual culture studies (Mirzoeff 1998<sup>15</sup>; Ruby 2007<sup>16</sup>; Sturken and Cartwright 2001<sup>17</sup>). Resident in each of these interdisciplinary traditions is a non-apologetic rationale for understanding social phenomena outside the framework of more traditional, scientific methods based in assumptions about objectivity in social research. This latter view, the one that is employed in this study, concludes that a true picture of objective reality can never really be achieved through any research strategy, through visual representations or more objective designs (such as quantitatively-based survey research, interviews, or secondary data analysis), since any strategy necessarily evokes the bias of the observer. Given this premise, then, the task for visual sociology, like any other research methodology, is to describe what is being observed while

reflexively acknowledging the researcher's subjective understanding of the phenomenon under investigation. Utilizing photographic evidence is considered equal to written depictions of these same observations, to the extent that the researcher can articulate his or her own biased understandings of what is being observed, and can offer clear ruminations of one's own interpretation of findings (Ruby 2007<sup>18</sup>).

This study relies exclusively on photographic representations of the act of illegal rural dumping and, because the evidence of this activity is based on the after-image of the dump itself, the study must infer certain attitudes, motivations, and/or rationalizations about the act. In drawing this connection between the image and the supposed social-psychological state of actors involved in this activity, or consumer culture at large, it is critical that the images chosen for analysis be transparent in terms of the researchers' bias in sites chosen to be photographed (or not photographed), and in the manner in which they were photographed, such as angle, lighting and focus. Most of the images in this study were clarified (using Photoshop) by sharpening, saturating or color-tinting, cropping and, in some cases, collaged, for the purpose of providing a clearer visual image of the dump site or emphasizing a particular feature of that site. Although these alterations do provide a somewhat more artistic image than the actual observation in the field, the intent was to provide the viewer with a clearer representation of the dump site and/or to highlight one particular feature of the site that is relevant to the focus of the study, rather than to merely make these images visually appealing.

It must be acknowledged that certain aspects of the dump sites cannot be accurately presented to the reader of this study (through visual representations, written or otherwise), such as the smell of these sites, the outlying physical environment that surround them, or how they change in size, shape and content over time. In presenting static, two-dimensional images of these sites, we run the risk of neglecting important, dynamic features about them. For instance, it was observed that some of these sites changed in profound ways over time (including the content, shape, size and smell), particularly once the site was discovered by others as a suitable site for dumping. That is, once somebody dumps, it seems to be a signal to others (or perhaps the same persons) that this is an appropriate space for future dumping. So, although snapshots of activity can be taken at different moments in time of these sites, and certain conclusions can be inferred by comparing these static images (such as examining what appear to be older dumps adjacent to new ones that had not existed in the previous shot), it is difficult to surmise much about attitudinal differences among dumpers between or during these dumps. It is also important to note that not much can be said about the demographic characteristics of these dumpers. Although this researcher did observe, on two occasions, an actual dumping in progress, and although a few informal interviews were conducted with people who have dumped, the data offered here cannot establish a clear demographic profile of these offenders. Just because these sites are located in rural areas does not mean that all dumpers are rural residents. In fact, the visual evidence suggests that much of this debris is driven out from other areas, such as home construction sites in new suburban developments. As such, this study refrains from making over-reaching claims about the kinds of individuals or groups who engage in this activity, or what motivates them on an individual level.

#### Parameters of the Study

This study examines photographs taken at over 300 dump sites located on public lands, including Bureau of Land Management (BLM) and Forest Service lands, designated wilderness areas and wilderness study areas (WSA's), and city and county parks. Although these sites were most commonly found along dirt roads (such as fire access roads) and hiking trails that penetrate more remote areas, some piles were discovered in the open desert, on public beaches or river walks, and mountain canyons near the highway. Photographs of these trash piles were taken in dozens of counties across seven states (Michigan, Illinois, Louisiana, Utah, California, Oregon and Washington) between 2005-2011. Photographs were categorized by state, county and date of discovery and organized into distinct types of trash piles using a content analysis strategy. That is, piles with similar material were categorized together, allowing for a clearer picture to emerge of the different types of dumps that exist. In organizing the data in this way, we can more precisely speculate about the different types of offenders and their unique motivations for dumping in these areas. The author of this paper was the sole photographer.

As mentioned above, this study does not include either intentional or unintentional acts of minor littering in these areas, such as an individual bottle or wrapper left on the ground. Because such evidence may actually be stray debris from another location (wind-blown or carried by birds or other animals, for instance), and because we cannot clearly demonstrate that this kind of debris was discarded intentionally by an individual or group of people with a premeditated, rationalized plan of action, such evidence was excluded from analysis. The focus of this study, then, is to document the kinds of trash piles that exist in public, rural spaces and to attempt to uncover any underlying social-psychological imperatives for this activity. As such, the study of the dump is twofold. First, the trash piles themselves are described and dissected in order to categorize these piles by type. Second, and concurrently, this study ruminates on the likely motivations and rationales for each type of dump, based on the visual evidence. In doing so, this study hopes to provide the reader with a clearer understanding of these motivations and rationalizations but, also, to draw a connection between these social-psychological factors and the larger cultural imperative that illegal dumping serves for our consumer society. Speculating on the larger, cultural forces that drive (literally) illegal dumpers out to our public lands may provide clearer solutions to the numerous problems that this kind of illegal activity poses for society and for the environment – and for those of us who enjoy the more pristine and natural settings that our public lands offer.

#### **Dump Typology**

There are basically five different types of dumps on public land, ranging in size and purpose, which can be observed throughout the United States. For the most part, these piles are remarkably similar in content and origin across the diverse landscapes of rural America.

#### The Family Spring Fling.

The first type of dump is the *family spring fling* (Figures 1-3). These piles include old shingles, windows, scrap wood, leaves and various other yard debris, often the bi-products of an annual

spring cleaning around the home but sometimes just an old pile of crap that has become an eyesore over time, sometimes including furniture and small appliances, but also old electronic equipment (e-waste) such as televisions and the antiquated VCR machine. These kinds of piles suggest that, for some, the amount of unwanted stuff around the home has mounted to a point that it becomes unmanageable. These appear to be the most desperate of all dumps – a random collection of yard debris, electronics, furniture, empty paint cans, etc. – all of which are loaded up and dumped together. The material mixes of these sites also make them the most visually fascinating.



Figure 1: Spring Fling - A

July, 2005. Taken in Roscommon County, Michigan, in an open field near jeep trails in Forest Service land. Represents disposal of excess in a consumer society, and possibly the reconstruction of human spaces into more familiar scenes.



Figure 2: Spring Fling – B

November, 2007. Taken in Cowlitz County, Washington state along a remote construction route through wilderness area near Mount St. Helens. Depicts a land ethic within our disposable, plastic society.



Figure 3: Spring Fling – C

March, 2010. This family dump site was discovered in the high desert of San Bernardino County, California. Random displacement and tire tracks indicate a desperate and exasperated event from the back of a truck alongside a dirt trail attached to the nearby interstate.

As individual piles, a story emerges about a particular family, their consumptive patterns and what kinds of items have been materially displaced by more modern wants (such as that old television, VCR machine, couch, bed or office chair that has sagged over time), or a family that has grown up, eliminating the need for a partially broken (but still usable) infant car seat. Collectively, these piles tell a different story about material culture, about how ubiquitous many of these items are in society. Household goods that are abundantly available in any local megastore are more likely to find their way into the wilderness as trash down the road. It should come as no surprise that the cheap, abundant and most commonly used household products of our society are most commonly discarded on public land.

Another interesting feature of these sites is the rationalizations that are inherent in the pile itself. More specifically, the manner in which these piles of remnants are left behind are evidence of guilt management. Sometimes, guilt is managed under the auspice that the haul is biodegradable. One of my favorite sites (if I can say that) was a pile of leaves in Roscommon County, Michigan on Forest Service land neatly packaged in biodegradable Home Depot paper sacks (Figure 4). Sites like this one, and other piles of gravel, sand, sticks and stumps seems to say that many dumpers think they are doing no harm to the environment since the materials they pile up are "natural." If it biodegrades, on whatever mythological time scale resides in the minds of these dumpers, then the dump is morally clean. A related and similarly false justification is the belief that if the pile is left near other piles that it is left in a legitimate dumping space, in designated wasteland, or that it will be hauled away by some public agency responsible for such debris (Figure 5). Once a dump site has been established, it is common to see adjacent piles appear over time. Since similar debris piles usually accumulate near each other, it is presumed that the offender rationalizes the dump as a legitimate dumping ground, or as a place that is already tainted as less-than-pristine. It is already wasteland and, even though this is not an official landfill, it is clearly an area marked by the community as a legitimate alternative to the landfill. Unfortunately, it is a rare event when a public agency or local community group finds the resources to clean up a dump site, and the rate of pileups far exceeds cleanup efforts (or nature's ability to reclaim these materials at the rate at which they pile up).



Figure 4: Evidence of Eco awareness

May, 2007. Taken in Roscommon County, Michigan along a hiking trail in Forest Service lands. Represented here are conflicting values at a multiple dump site, ranging from eco-awareness in the form of biodegradable bags to the more thoughtless dumping of toxic plastics, steel, and rubber tires.



Figure 5: Double Dumping

May, 2011. Taken along jeep trail in Roscommon County, Michigan on Forest Service land. The pile of branches to the left was placed over an existing pile of leaves and branches, and along a pathway where several other piles of (mostly) natural debris were left over successive spring seasons. Represents the process of legitimization of a wasteland on public lands.

Apparently aware of this vague reality-that the junk left in the woods will be there for some time to come and that it will be visible to others-some dumpers find it in their hearts to leave behind an aesthetically pleasing pile, such as window frames places artistically around a tree (Figure 6). It cannot be ascertained whether these kinds of unique piles are the result of some degree of personal shame or guilt in dumping, or whether some practical purpose was thought to be served (maybe it was thought that laying wood flat on the ground in this manner improves biodegradability). However, the evidence suggests that, at least for some, the dump site was deliberate and considered, with a certain degree of shame and guilt in some instances, and not merely a quick drop in the first place that looks like nowhere.



Figure 6: Frames

April, 2007. Taken in Roscommon County, Michigan, along a jeep trail in Forest Service land. The thoughtful, deliberate placement of debris is evident. This dump did not exist the day before, making it unlikely that the arrangement is due to random causes (e.g. wind, animals or other humans). Why such a display? Concerns over biodegradability? An artistic endeavor?

It is important to point out most rural homes or farmlands with more than a couple acres usually have their own private dumping ground and/or compost pile which serves the majority of dumping needs, particularly biodegradable material. Even in these households, though, the need for a public dump seems to percolate, possibly expedited by this traditional dumping strategy (Figure 7). The private land dump may foster ambivalence to dumping in some ways, and evoke sentiments and justifications about the land that then transfer to public spaces. That is, if piling our debris in the corners of our residential existence is a tradition, why should piling them in public spaces be viewed as such a very different enterprise? Open space is open space, and it serves the purpose of making room for those spaces we have carved out for more routine daily activity. These piles on private land are almost always located in the most remote corners, which further disassociates the activity of dumping with other activities that take place on the lawn, in the garden (excluding compost piles), pasture, or play areas. Furthermore, open space in rural America is not always clearly designated as "public" or "private" in the first place. Although it may be officially designated, longstanding rural traditions about the legitimate use of rural space

may override any posted sign or non-enforced law that applies to that land. It may be that, for country dwellers accustomed to lots of freely accessible open space, the tradition of designated private dumping grounds, coupled with a blurring of lines between what is "public" and "private" land, leads to a certain indifference about an illegal dump on public land.



Figure 7: A Private Dump

March, 2010. Taken in Camas Valley, Oregon on private farmland. Rural dwellers have a long history of established compost piles, but also debris piles of both natural and manufactured materials. A tradition of dumping in nature may foster attitudes of entitlement for dumping in public spaces, particularly when public and private boundaries are blurred.

#### **The Construction Dump**.

The construction dump represents most of the larger piles, and the most hazardous, characterized by huge mounds of shingles, drywall, scrap wood, nails, wires, plastic tarps, buckets, toxic chemicals (like paint, oil and asbestos), and other assorted construction debris. The motives and rationale for this type of dump appear to be distinct from other dumps, in that the piles are clearly large, premeditated offloads of waste from a recent construction project. They usually contain just one or two types of debris, as in the case of a shingle or wood pile, and are most commonly located just off a dirt road wide enough for a truck to travel. This kind of dump indicates that the offenders feel a need to rid themselves of a sudden, perhaps unforeseen mountain of excess material. Although the piles do not usually provide enough evidence to determine whether they were left by private constructions crews—although many of the sites observed were located just outside the boundaries of a new suburban development project—or as the remnants of a family home project, they do suggest that the offenders made a conscious decision to find a large enough space, and one that is easily accessible by heavy truck. Because local landfills often charge additional fees for construction waste, and because they are sometimes a few more miles away than the criminal alternative, it would seem that some people haul such waste to nearby wild areas in an effort to save both time and money.



Figure 8: Construction Dump – A

May, 2011. Located adjacent to a utility road next to the interstate on abandoned property, this construction pile in Macon County, Illinois, appears to be a well-organized, multiple trip event involving heavy trucks and several helpers. Appears to be roofing material from a nearby church.



Figure 9: Construction Dump – B

November, 2009. Taken in rural Oregon, Douglas County. The structural debris seen here was likely placed there by the nearby college, onto public school land that the college occupies (structural materials from an old maintenance shed on campus property).



Figure 10: Construction Dump – C

November, 2007. Taken in Cowlitz County, near Mount St. Helens in Washington State, alongside rural roadway. This image typifies the construction dump in its massive size and systematic unloading of large, heavy loads of construction debris by a group of people.

Related to the construction dump, but in some ways unique, is maintenance debris, similar to construction debris but typically originating from public development projects that occur on the public land itself, such as excess trees felled during a logging operation, gravel and rock piled up from a mining operation (or other project that involved bulldozing), or huge piles of branches left to decay by a park maintenance crew (Figure 11). Once the project is completed the site is vacated, but large areas of leftover trash are often left behind, sometimes followed by an accumulation of other dumps once it has been established as a legitimate dumping area. In the case of ongoing debris accumulated by a maintenance crew (in a public park, for instance), the site can serve as an established, private-like dumping ground, similar to the segregated private dumps described earlier.



Figure 11: Maintenance Debris

September, 2009. Taken in Douglas County, Oregon, inside county parks boundary alongside a remote river walk. Interviews with park managers revealed that this site was "historically used" for such dumping by county parks maintenance crews. It was discovered that the roofing shingles and tar paper were added to the original pile of sticks and other natural debris by the same crew. Once informed, the shingles were promptly removed; however, the rest of the pile was left by the river, obstructing one of the best views of the river in the park.

One specific case of officially sanctioned dumping on public land can better illustrate the purpose and rationale of the construction dump. In late 2009, an apparent illegal dump was discovered in a small, rural county park in southern Oregon. When this site was first discovered it was a single pile of dead branches and roofing material located along a riverbank, just off a well-worn trail that follows the river from the main park entrance into a narrower trail that leads to the stony riverbank below. If this sounds like a beautiful place to stroll, it is! What meets the hiker of this trail, however, is a rather abrupt encounter with this massive pile, which shields a particularly good view of the river as it bends southward, just before the trail winds down to the riverbank. The nature of this dump was given away by wide tire tracks leading away from the site, through a locked gate, and into the main park area. So, it was assumed that the dumping was sanctioned by the county park system themselves.

Indeed, upon formal inquiry to the park manager and park director, this assumption was confirmed. What is interesting about this inquiry were the reasons given for the dump site, and its location. When asked why a decision was made to create a dump area in this particular spot, the response from the park director was that, given budget constraints, it is necessary and common to handle park debris in this way, and that the spot chosen was convenient and "historically used" for later burning. The director did acknowledge that roofing materials should not have been added to the pile of branches and ordered that they be picked out from the rest of the debris and discarded elsewhere (where it was taken remains a mystery). Despite the considerable time and effort this must have imposed on the park maintenance crew (as opposed to using heavy equipment to simply remove the entire pile), the order was successfully carried out within five days of the initial query. Perhaps more telling, within a month the pile had evolved into two piles of debris, the original pile that grew in size (but with just more branches) and a second pile containing smaller sticks, dirt and gravel just next to it. It was also observed that some individuals hiking by must have felt that the second site also served as a sanctioned

area for littering, as it appeared to attract more of this random litter than before its existence (Diagram 1).



Diagram 1: Evolution of a Dump Site

As a case study, then, this county-sanctioned dump serves to illustrate the evolution of a dump, as well as the larger social mores that surround the act of dumping. First, the growth of a small pile into a large one, or several more surrounding piles, seems typical to the evolution of a dump site. This tendency may be influenced, at least in part, by the legitimization of the site as a traditional space for dumping. The land has been labeled – it is a wasteland. In this case, the label was officially given by the park authorities; however, it may also be true that the mere existence of a site may signify that a space has been determined to be an appropriate place for waste disposal. Once somebody dumps, with or without permission, that area becomes associated with dumping space, and other offenders, may be more readily cast aside any moral inhibitions about littering since the area is already quarantined as such. The area is lost, but at least it can serve the practical purpose of displacing refuge.

#### **The Appliance Plop.**

The appliance plop sites are the most obvious, often found in open fields near paved roads, looking much like a miniature scrap yard (Figure 12). These dumps include old washers, dryers and refrigerators, but bodies lay here too – car bodies, engines and other assorted parts (Figure 13). Unlike broken down cars that lie on private land (ostensibly providing a perceived future need for spare parts), these vehicles are abandoned on public land with no intent for recycling

parts. Rather than hauling these items to a public landfill, or utilizing a free appliance pick-up service, some people opt to load them up and roll them off the back of a flatbed truck into a field or other open area that is accessible with a larger truck and/or trailer. Usually, these areas have already become an open graveyard for other unwanted metals, again suggesting that those dumping feel less guilt about abandoning their trash in places that already contain trash. Near or amidst these piles are often other larger items (mattresses, bed frames, couches and chairs), including piles described earlier as the family spring fling. It is worth noting that these sites have an almost archeological feel to them, like visiting Stonehenge, because items are laid down more spaciously and offer a clearer picture of the remnants of a modern society (Figure 14). Unlike Stonehenge, these sites create a danger zone, particularly for children who use these areas as a remote playground, as many of these appliances can leak toxic chemicals such as Freon and mercury, or lack modern safety features (such as fail-safe locks) that can prevent children from being trapped inside an old freezer or refrigerator.



Figure 12: The Appliance Plop – A

April, 2007. Taken on unsupervised Forest Service land in Ottawa County, Michigan, in a ravine adjacent to an open field. Varying degrees of decay indicate multiple dumps. Bullet holes and nearby shell casings indicate that this area also serves as an unofficial shooting range.



Figure 13: The Appliance Plop – B

March, 2010. Taken in a farm field in Camas Valley, Oregon, on land not clearly marked as either public or private. Large object dumps like this seem to be most commonly associated with either private land or in areas where boundaries between public and private are not clearly established, but which are often assumed to be private land by the local residents.



Figure 14: Antiquities

April, 2007. Taken in a field in Ottawa County, Michigan, on unsupervised Forest Service land, this site illustrates a long history of discarding failed modern machinery, as well as an almost reverent resting place.

These sites are unique in that the motivation is more singular and obvious: a big thing is broken and needs to go somewhere else. What motivates these offenders may be related more closely to economic constraints than to anything else. Although many landfills accept this type of waste, some require hefty fees, as much as 30 dollars per appliance and 50 dollars per vehicle (Larimer County Landfill 2012<sup>19</sup>). Transportation obstacles, whether real or perceived—such as not having a truck that can transport these items without violating traffic safety laws, or not having the manpower, time or energy to make a longer drive to a landfill—may be largely responsible for these kinds of dumps as well. More troubling perhaps, is the fact that these heavy metal materials are not readily biodegradable, a fact that can't be lost on those who dump it - they know it will be there for some time to come. This is suggested by the location of such sites, usually far removed from the public eye, albeit in more open spaces. The two largest sites observed in this study were in the open desert (adjacent to the county landfill), and in a field known to be owned, but not patrolled, by the Forest Service. In both cases, the objects were out of sight from any major road and precautions were taken to roll the object down into a valley or crevice when such terrain was available. As such, these sites are similar to others in that precautions are taken to obscure the junk, and that offenders obviously deliberated over a strategy for their dump, knowing it was either illegal or unethical. And again, an appropriate space was an empty space or, preferably, one that had already been established by an earlier offender.

#### The Drive-by Dump.

The drive-by dump is literally the act of tossing trash, usually in the form of garbage bags or larger items, out of the car while traveling down the road or highway (Figures 15-17). To clarify, this study excludes litter, such as a Big Gulp cup, McDonald's wrapper, or soda can on the side of the road and, instead, focuses on the larger trash bags and materials that represent an accumulation of a variety of trash over time and, hence, the deliberate act of dealing with this accumulated garbage. While some of these sites are likely the result of loosely tied-down garbage that has accidentally fallen off a truck on the way to the landfill, many of these dumps seem to be a strategy for the panic-driven person who feels too busy to consider alternatives, as evidenced by the content of the bags tossed - fast food wrappers, empty bottles and cans, and other kitchen-related waste. This is daily trash resulting from daily activities like eating and cleaning and is therefore more likely to end up in a legitimate landfill straight from the kitchen trash can. As such, it is likely that this offender is not local, but someone passing through from out-of-town and who needs to be liberated from trash that, for one reason or another, could not be left at home or carried to a more appropriate location. Due to time constraints, or utter disregard for the environment, some people just throw accumulated trash out the window when nobody is watching. What is also unique about these sites is that they are purposely left in open eyesight, rather than being driven to remote, unpaved areas. As with the family spring fling, it is likely that at least some of these people imagine that a road crew or some other agency will come along and pick it up, especially if it is conveniently pre-bagged and carefully placed on the side of the road for them, which is sometimes the case.



Figure 15: The Drive-By Dump – A

April, 2008. Taken along a canyon roadside in Iron County, Utah. Home waste left near a much older dump of construction debris. Waste pattern is scattered, indicating that this trash was thrown from a moving vehicle.



Figure 16: The Drive-By Dump – B

November, 2007. Taken in Cowlitz County, Washington State, along a roadway in a remote area. Evidenced in this photo is the act of home kitchen waste being placed along with construction debris. Behind these piles, in the forest beyond, is a larger dump site near an abandoned shack on private land, which seems to indicate blurred private/public boundaries and a traditional, legitimized dumping space that has been created over time.



Figure 17: The Drive-By Dump - C

January, 2009. Taken in rural Tillamook County, Oregon, along a dirt road leading to wine country. Although it could not be determined if both the mattress and branches were left by the same person(s) at the same time, this was a new site which may induce others to dump here now that it has been established as legitimate dumping space.

#### Teenage Wasteland.

Finally, is what can only be described as teenage wasteland. Most people raised in rural America know what this pile looks like. It is the pile left behind after a late-night, outdoor rendezvous (Figures 18-19). Usually accompanied by a nearby campfire, these sites can be located in the deep woods, in the desert, on the beach, or in any other outdoor venue conducive to a variety of status offenses popular among minors, particularly bored minors in the hinterlands. Taco Bell wrappers, soiled pornography, cigarette butts and beer bottles are the hallmarks of these sites. Although an assumption has been made here that these offenders are characteristically rural residents—not just because of all the Mountain Dew bottles, but because presumably urban kids aren't driving many miles to party in the forest—the raw photographic evidence exposes them as young partiers, in small to large groups, who frequently revisit the same area. Here, public space has been established as private, and remotely well-suited for all the requirements involved in teenage partying. Once designated as such, the party is reconstructed the following weekend at the same unmarked location. What further distinguishes teenage wasteland from other dump sites is the rationale for dumping, or lack thereof. Since this type of dumper has not entered public space for the explicit purpose of dumping (they came to party and the waste produced is merely a bi-product), exactly why these offenders don't pick up after themselves remains somewhat unclear and speculative. It could be that this trash is too incriminating for minors to be worth packing out, or perhaps they are just too intoxicated to consider it. The empty bottles of whiskey and wine left behind would indicate the latter, although most of the beer bottles and cans are absent, presumably taken and returned for deposit, where possible. Alternatively, like other dump sites visited, it could also be that their apparent disregard for the natural environment is predicated by a certain rationalization that the space is a designated junk zone. Once branded, the area is contaminated by an attitude of careless disrespect and, subsequently, by the remnants of a late-night fast food run, illicit adult reading materials and the dried-up pool of vomit that lies invariably nearby. The majority of these young partygoers appear to be male, based on the artifacts left behind, which commonly include pornographic materials, whiskey bottles, and bullet casings.



Figure 18: Teenage Wasteland – A

April, 2007. Taken in Roscommon County, Michigan, in a remote Forest Service area near fire road. Waste in such sites indicates that the most common activities in these spaces include a party around a campfire involving heavy drinking and convenience food.



Figure 19: Teenage Wasteland - B

August, 2006. Taken in Roscommon County, Michigan, in a remote Forest Service area. Pornographic materials are strikingly common in the wilderness, suggesting that young males are more typically involved in these activities.

Arguably, other types of dumps exist. For example, hunting debris comes mostly in one form, a pile of shells or clay target fragments on the ground. As a general rule, hunters, hikers, fishers and other outdoors people are sensitive to the land and make a sincere effort to pack their trash out. One obvious exception, however, are bullet casings that scatter the landscape, often in noticeably colorful piles on the ground on the fringe of an impromptu shooting range. Like cigarette butts, many hunters may simply not feel that discarding these shells (wherever they happen to fall while shooting) is a form of littering. Also, in the occasional, abandoned hunting camps, hunters have discarded materials from their blinds along with an assortment of tarps, bungees and ropes, and animal renderings. However, this seems to be the exception to the rule (Figure 20).

Another form of illegal dump, one that is probably worthy of its own independent investigation, is the water dump, referring to the raw tonnage of often hazardous material dumped into our rivers, lakes, streams and oceans on a daily basis. Although evidence along these shore ways is not hard to come by (Figure 21), actual piles of debris are less common here, as these materials lay below the surface, or are washed away. The recently discovered "Great Pacific Garbage Patch," a large area of marine debris consisting of mostly plastic, chemical sludge and other debris discovered in the central North Pacific Ocean (estimated to be twice the size of Texas), and the more recently discovered "Great Atlantic Garbage Patch," another area of similar marine debris found between Bermuda and the offshore islands of Portugal, are further examples of the cumulative consequences of our propensity to discard plastics and other chemical biohazards into our waterways (Day et.al. 1988<sup>20</sup>). Certainly there are also other less common, but distinguishable forms of dumping in the varied landscapes of rural America that have yet to be documented.



Figure 20: Hunting Debris

August, 2006. Taken in Forest Service land in Roscommon County, Michigan. Although hunting camps and discarded bullet casings are common on public lands, this abandoned hunting camp with discarded tarps and ropes is a less common occurrence in such spaces, suggesting that hunters often adhere to an environmental ethic and/or have respect for pristine nature.



Figure 21: The Water Dump

November, 2009. Taken along the South Umpqua River near Winchester, Oregon. Although it is difficult to determine the origin of such waste, or whether it was purposely disposed of, the abundance of such refuge in our lakes, rivers, streams and oceans suggests a need for further study in garbology.

#### Why Do People Dump?

Understanding that much more could be gleaned from a closer and more thorough inspection of rural dump sites, what can be said of what has been observed thus far? Beyond the more obvious picture of what is dumped, what can we really say about what motivates someone to dump, or how one rationalizes the act? The visual data presented here shows an act that is premeditated, covert, rationalized and, in some cases, riddled with guilt. But can this activity be explained in terms of a unique set of environmental attitudes that provide the prerequisite rationalizations that seem to exist among illegal dumpers? Does a relationship exist between how one views nature and how one engages with it?

The long history of scholarship on environmental attitudes, and the pertinent research on the relationship between how someone views the natural environment and how that view guides their actual behavior, can be used to better understand why people dump in this manner. The earlier, more interdisciplinary writings on environmental attitudes which date back to more romanticized writings about the land such as Aldo Leopold  $(1949^{21})$ , Baruch Spinoza  $(1951^{22})$ , Robinson Jeffers (1959<sup>23</sup>), Walt Whitman (Kaplan 1979<sup>24</sup>), Ralph Waldo Emerson (Richardson  $1995^{\frac{25}{2}}$ ), Henry David Thoreau (2004 $^{\frac{26}{2}}$ ), John Muir (Worster 2008 $^{\frac{27}{2}}$ ), Gary Snyder (1974 $^{\frac{28}{2}}$ ),  $2007^{\frac{29}{2}}$ ), Wallace Stegner (Fradkin  $2008^{\frac{30}{2}}$ ), Rachel Carson (1965<sup>\frac{31}{2}</sup>), and Thomas Roszak  $(1992^{32})$ , emphasize the aesthetic beauty of the natural landscape and hearken a return to preindustrial, agrarian (if not tribal) understandings of the value of land for the purpose of emotional, spiritual and intellectual enlightenment. This pronouncement of the unquantifiable, more esoteric qualities of nature is later drawn out by deep ecologists in their claims regarding the interconnectedness between humanity and the natural environment, including their concerns about modern civilization's tendency toward environmental degradation (Bradford 1989<sup>33</sup>); Devall 1988<sup>34</sup>; Devall and Sessions 1985<sup>35</sup>; Drengson 1980<sup>36</sup>; Foundation for Deep Ecology  $2006^{\frac{37}{3}}$ ; Naess  $1988^{\frac{38}{3}}$ ,  $1989^{\frac{39}{3}}$ ). These writings also form the basis of the deep ecology movement and the driving ideology behind groups commonly referred to as "radical

environmentalists". (Abbey  $1975^{40}$ ; Earth First!  $2004^{41}$ ; Forman  $1991^{42}$ ; Molland  $2006^{43}$ ; Scarce  $2006^{44}$ ; Zimmerman  $1997^{45}$ )

Some of this sociological research, from a human ecological perspective, offers insight into how cultural differences result in different kinds of attachment to the land and how these differences then affect later conflicts over proper management of the land when these different values over the land clash during land policy disputes (Bridger 1996<sup>46</sup>; Carroll 1995<sup>47</sup>; Edelstein and Kleese  $1995\frac{48}{199}$ ; Firey  $1945\frac{49}{199}$ ; Greider and Garkovich  $1994\frac{50}{199}$ ). This body of scholarship has bearing on any environmental policy debate, and offers a clearer understanding of why certain groups resist proposed changes to land policy with such fervor, in that oftentimes these changes are a direct affront to one's very identity. The notion that our identity is tied directly to our understandings of the natural environment, and that our resultant claims and confrontations over land policy are driven by our own perceived relationship to the land, is central to this investigation. It is clear that those who dump are rationalizing their actions with certain beliefs they hold about the value of land (Greider and Garkovich 1994<sup>51</sup>; Greider and Little 1988<sup>52</sup>; Johnstone 1990<sup>53</sup>; Maines and Bridger  $1992^{54}$ ). More specifically, to the extent that the visual evidence shows a disregard for land aesthetics or environmental degradation, those who dump seem to be viewing the land as merely wasteland, which allows them to justify their dump as an appropriate course of action. While the evidence suggests that many of these individuals grapple with mixed feelings about dumping (e.g. the secret nature of dumping and the manner in which trash is dumped), the propensity of dumps across rural America suggests that a more anthropocentric (humancentered) view of the land prevails over a biocentric (species-centered) one (Shantz  $2002^{\frac{55}{2}}$ ; Sessions  $1974^{56}$ ). That is, any cognitive dissonance over dumping diminishes under the auspices that the land serves the primary purpose of providing a space for human disposal and has no real value beyond these human needs for consumption and waste disposal. Such an attitude, which appears to play a primary role in justifying the rural dump, must be considered as part of any public policy that attempts to deal with the problem of this illegal activity.

Alongside this important scholarship on environmental attitudes and their relationship to land disputes, is ongoing work in the realm of social-psychology, such as Clayton and Opotow's (2003<sup>57</sup>) synopsis of research on identity and the natural environment. Similar to research discussed earlier, Clayton and Opotow posit that public policy debates over the environment are fundamentally identity debates. That is, any public policy discussions over the land (such as how to deal with illegal dumping) must first acknowledge the primary role that environmental identities play in such disputes: the way we view the environment is central to how we engage it.

"Understanding identity and its role in mediating behavior toward the natural world not only has provocative implications for research, but is also has important practical implications. If we better understand what makes people passionate about the environment, we can understand the psychological mechanisms capable of fostering protective environmental policies and behavior." (Clayton and Opotow, 2003, p.  $2^{58}$ ).

In summarizing the body of research devoted to the psychological significance of nature, Clayton and Opotow provide us with tangible, quantifiable studies that offer some practical solutions to the problem of illegal dumping. In each of the studies reviewed, including their own work, they emphasize the importance of tying individual interests regarding the land to larger, social

interests present. For example, they cite work on the development of environmental morals in children that show that, across cultures, children who interact with their environments in both physical and intellectual ways develop a stronger sense of environmental community and later pro-environmental actions than those who do not (Kahn 2003<sup>59</sup>; Kals and Ittner 2003<sup>60</sup>). For adults, also, studies have shown that the more people interact with the environment as a community of engaged learners, the more environmentally responsible their behaviors become (Holmes 2003<sup>61</sup>; Kempton and Holland 2003<sup>62</sup>; Opotow and Brook 2003<sup>63</sup>; Zavestoski 2003<sup>64</sup>). In other words, pro-environmental attitudes are fostered through community-based interactions with the natural environment, and this interaction results in greater eco-awareness and more pro-environmental actions on a behavioral level.

As a general rule, then, they demonstrate through empirical research that pro-environmental actions are promoted when individuals come to see how their own interests are served in the larger social milieu of interests. That is, by understanding – and engaging in – environmentally responsible actions on a community level, people tend to become more sensitive to the larger environmental issues that affect their local area. They also provide a usable model and practical suggestions for directing environmental policy, based in an understanding that one's social orientation (how people engage society) is interactively related to one's environmental orientation (how people engage the natural environment). From this standpoint, they recommend specific ways that pro-environmental action can be facilitated in public policy debates, such as fostering these debate around moral obligations to the land rather than merely resource exploitation needs; by recognizing humankind's interconnectedness with nature (both locally and globally) rather than couching the debate in purely reductionist or anthropocentric terms; and by recognizing and emphasizing shared environmental concerns among competing group interests over the land (Clayton and Opotow 2003<sup>65</sup>).

#### **Conclusions and Solutions**

Why do people dump illegally and what can be done about it? While this study cannot fully answer these questions, it does provide a conceptual lens for understanding the problem on an ideological level, and can offer some practical solutions based in the methodology of garbology and the social-psychological science surrounding environmental attitudes. But before these ideas are expressed in terms of solutions, a brief consideration of the more pragmatic side of study in this area should be given. Specifically, the most obvious considerations regarding our consumer society, community resources, and what has been learned in the field of environmental criminology deserve attention.

One obvious reason for illegal dumping is that we have too much stuff and not enough space to put it when it becomes trash. Regardless of ideology or environmental attitudes, American consumption patterns are the highest in the world – we have the most stuff. Subsequently, we have more to throw away than any other culture in the world. Our landfills are filling up and the pressure is on to find new and innovative ways to deal with our trash. As we come to grips with this reality, some find themselves in circumstances where the option to dump illegally-whether real or imagined-is considered to be the best option. For some, this seems to come as sort of a panic attack, and the urge to get rid of the waste is greater than their ability to think through other options. Although solving the environmental problems of a hyper-consumer society such as ours is beyond the scope of this study, recognizing our dilemma and supporting education campaigns

to "reduce, reuse and recycle" seems like a step in the right direction, as it might provide panicked individuals with a greater array of legal alternatives.

Insofar as public policy can deter those who are considering an illegal dump, the field of environmental criminology has offered some practical considerations and solutions, in the context of the ecology of deviance, that have merit. From the environmental criminological perspective, we are urged to examine the "awareness space" of an offender, dependent upon the geography of the known area, as opposed to merely the social elements of the area, what Harvey (1972<sup>66</sup>) calls the "geographical imagination" of researchers (Brantingham and Brantingham 1981<sup>67</sup>). Since Goffman concluded in 1959 that "deviants declare their awareness of deviance by hiding it", emphasizing the role that the physical environment plays in determining deviance, scholars in this field have produced a mountain of empirical evidence demonstrating the importance that geographical landscapes have in determining the criminal act (Altman 1975<sup>68</sup>; Brantingham and Brantingham 1981<sup>69</sup>; Douglas 1970<sup>70</sup>; Jeffrey 1971<sup>71</sup>; Newman 1972<sup>72</sup>). As Wood states (1981<sup>73</sup>):

"The point is that the environment provides shelter for acts of deviance as a necessary consequence of its ordinary ongoing struggle to maintain itself, precisely as the forest provides shade for the growth of photophobic plants which die or wither in the sunlight. The trees no more intend to provide the shade immediately invaded by the mosses and ferns, liverworts and wildflowers, than the farmer does who in erecting his barn provides a place behind which little children can smoke. But the trees and the farmer do not intend to do so either. It is a necessarily attendant consequence" (p. 93). [emphasis in the original].

Related to the criminal dump, Rhodes and Conly (1981<sup>74</sup>) have demonstrated through empirical research that property offenders, such as illegal dumpers, are more likely to commit their offenses further away from their homes than other types of offenders (called the "criminal commute") if the opportunity exists. They also will select public spaces over private property because of the greater familiarity and isolation that these spaces provide. The researchers go on to suggest that, in these areas, a "clustering of crime" often occurs, as other offenders come to recognize the advantages of these remote options over more privately owned, urban ones. Another relevant finding in this area comes from Altman (1975<sup>75</sup>) who proposes that individuals have a psychological connection to both "primary" and "secondary" territories. Whereas primary territories are places actually owned by the individual, secondary territories are places that the individual *feels* belong to him or her, based on familiarity and usage. Because secondary territories can also be public lands, conflict can arise when these spaces are used as if they are privately owned, as in the case of rural dumping.

In terms of practical solutions, creating natural obstacles such as boulders or trees that prohibit vehicles from accessing some of these more remote areas, or by making potential dump sites less attractive to the potential dumper by lighting it at night, or patrolling these areas more frequently can help reduce the likelihood that someone will dump. In addition, research suggests that when the community is involved in the problem, and takes part in the solution (e.g. a neighborhood watch program), crime is deterred (Brantingham and Brantingham 1981<sup>76</sup>; Brown and Altman 1981<sup>77</sup>). Efforts to expose these areas and practices to the public eye by removing the shadowy nature of this type of behavior can reduce crimes such as illegal dumping. Of course, resource

limitations, such as a lack of funding or personnel (particularly in rural areas where such resources are always strained) are in themselves obstacles to achieving many of these practical solutions.

We want to protect the natural environment. Most rural and urban citizens do revere wild places on public lands and appreciate the aesthetic and intangible qualities that these spaces offer. This sentiment exists across race, culture, gender and class, although not equally according to scholarship in this area (Brown and Swanson 2003<sup>78</sup>; Buttel and Flinn 1974<sup>79</sup>; Davidson and Freudenberg 1996<sup>80</sup>; Freudenberg 1991<sup>81</sup>; Kalof et al 2002<sup>82</sup>; Lowe et al 1980<sup>83</sup>). One important finding from this study not yet discussed, but one that some readers are intimately aware of, is the experience of being alone in the wild. During these most profound moments of introspective tranquility amidst nature, moments that only a wilderness experience can provide, you are occasionally startled by a pile of someone else's trash, piled irreverently high and looking quite out of place, in stark contrast to the wondrous landscape that surrounds it. The wilderness experience is now broken, as you now contemplate what kind of person would leave their trash here – instead of the more cherished thoughts that nature can evoke: the reason you took that journey into the non-human world to begin with. Most everyone who values the wilderness experience has had an experience like this, and it is this experience that a photograph cannot convey.

This project was born from such an experience I had some years ago in the backwoods of rural Michigan, although I didn't know that the pictures I felt compelled to take would accumulate so rapidly as I traveled across the country: I hoped it was just a Michigan phenomenon. Collecting data for this study was unlike any other, in that I could not escape my own emotions in the investigative process. As patterns of dumping began to emerge, I began to realize that the problem of illegal dumping also requires acknowledging the less tangible impact that these piles have on those who confront them. It is not sufficient to merely photograph the piles and categorize them because, in discussing environmental impacts, all researchers are obligated to concede that the injuries caused by these dumps are not just to the physical environment but to the human spirit as well. For most people, seeing one of these dumps is depressing, and it is important to acknowledge this felt reality as one important, negative social impact of an illegal dump.

We try to protect the natural environment. Strict ordinances exist that, although difficult to enforce, signal a strong collective will to deter illegal dumping. Harsh penalties exist in many communities, typically around \$500 for a first offense. Recycling and composting are now available in some of the most remote rural areas and special days are regularly designated in some communities for free yard waste pick-up. Drop-off centers for hazardous waste, old cell phones, batteries, oil and other more exotic trash are available in many towns. Arrangements can be made with local townships for large-scale construction debris removal. Services such as this exist almost everywhere, are generally supported by willing citizens through taxes, and are usually advertised in comprehensive ways, in both the print and electronic media.

So, why should we have so many piles of garbage in our wild places? This study, drawing from what has been learned in the scholarship on environmental attitudes and utilizing a visual approach grounded in the science of garbology, provides answers to this question that cannot be otherwise understood from merely the more practical positions of environmental criminology, economics, law enforcement, or public policy in general. From this perspective, any policy

geared toward eliminating the criminal dump, and the inevitable environmental impacts, must first recognize how the space itself is valued and how pro-environmental behaviors can be fostered through promoting engaged communities. Specifically, a policy that institutionalizes community involvement, one that encourages and teaches environmentally-responsible behaviors, and one that promotes physical activity in areas prone to illegal dumping, such as outdoor recreational or educational programs for children and adults, will be a superior approach to one that merely restricts public access with barricades, increases penalties for dumping, or which simply creates a new, unenforceable law that further criminalizes the act. Confirming what has been learned in other studies regarding the complexities of environmental attitudes versus actual behaviors, this study shows that consideration must first be given to the attitude-behavior interplay. With respect to illegal dumpers, based on the visual evidence, it is apparent that damaging attitudes about open, public space need to be addressed for any public policy to be successful.

Rural areas are unique in both their physical and social qualities and there is a certain irony that, in some of the most beautiful natural landscapes, exist some of the most abhorrent environmental practices, like rural dumping. For some, the value of the land is solely what can be extracted from it, including, in this case, what can be discarded onto it. Sadly, it may also be that, for some, nature is a toilet. It is the place where waste goes. Long-term lessons regarding the consequences to the environment are easily dismissed in this cultural milieu – or were never learned at all. Coupled with an anthropocentric vision of stewardship and a God-given right to alter nature by any means necessary for human needs, the pick-up truck is loaded once again for another haul out to the wastelands. Any solution to the problems associated with illegal dumping that are not sensitive to these systemic and longstanding cultural traditions will certainly fail.

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