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## **ILLEGAL DUMPING: LARGE AND SMALL SCALE LITTERING IN RURAL KENTUCKY**

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### ABSTRACT

Illegal dumping, a social problem greatly affecting some rural states, occurs at both the large and small scale as open dump sites and roadside trash. Focusing on Kentucky, a rural state without mandatory trash pickup and a per capita income below and a poverty rate above the national average, this photo essay describes the dumping and littering problem. As is shown, legislative and executive initiatives have made some inroads in large-scale clean up. Some local governments, however, appear apathetic about addressing illegal dumping in their own communities. Kentucky's litter problem is showing few signs of improvement and roadside littering seemingly is worsening. This problem, with resulting social, economic and environmental harms, is situated theoretically within a rural social disorganization thesis.

Within the United States, rural areas have always been disproportionately poor, despite national efforts at reducing the persistence of such poverty (Duncan 1999; Mangum, Mangum, and Sum 2003). The largest concentrations of poor residents are in the rural southeast with single mothers and minorities especially impacted (Brown and Lichter 2004; Lichter and Eggebeen 1992; Lichter and Johnson 2007; Lichter, Johnson and McLaughlin 1994; Tickamyer 1992). Largely rural, Kentucky is among the nation's poorest states with a per capita income below and poverty rate above the national average. The percentage of Kentuckians living in poverty is 17.0 compared with 13.3 for the U.S. while Kentucky's 2005 per capita income is \$28,513 compared with \$34,586 for the country (Lenze 2006; U.S. Census Bureau 2006).

The central problem described in this photo essay—Kentucky's illegal dumping, both large and small scale—is complicated further by entrenched rural poverty. Many Kentucky counties (41 percent) are designated as “economically distressed” (Mitchell 1994). The designation means that those counties have a per capita income of no more than 67 percent of the national average and unemployment and poverty rates at 150 percent or more of the national average (Wood 2005). Given the lack of public revenue generated within such counties, local governments are often unable to respond adequately to local dumping problems.

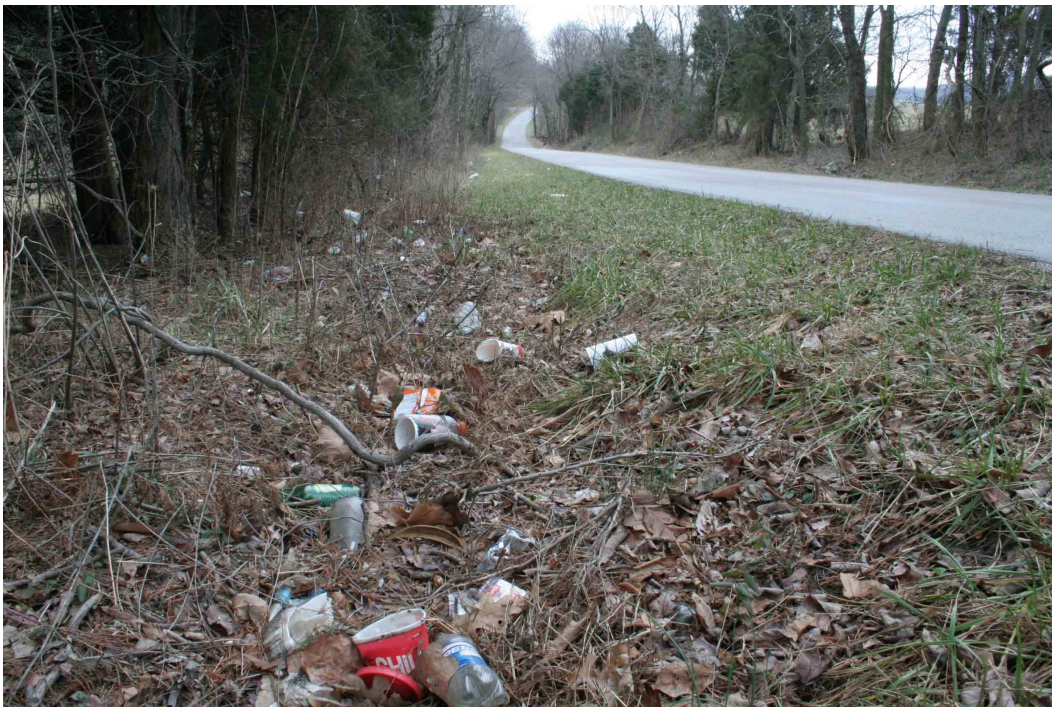
Within the Appalachian region of Kentucky, the economic realities are even more dire. There, 72 percent of counties are economically distressed and another

15 percent are considered “at risk” of becoming worse off economically. Per capita income averages just over \$14,000 and 24.4 percent of people live in poverty (Appalachian Regional Commission). Evidence shows that Kentucky’s poorest counties, many of which are in the Appalachian region, have the largest number of illegal dumps (Kentucky Long-Term Policy Research Center 2007). Poverty and illegal dumping, it seems, are significantly related just as poverty and poor health, poverty and shortened life expectancy, and poverty and personal victimization.

#### KENTUCKY’S EFFORTS AT CONTROLLING ILLEGAL DUMPING

According to Kentucky law (Kentucky Revised Statutes 512.010), litter, both large and small scale, is “rubbish, waste material, offal, paper, glass, cans, bottles, trash, debris or any foreign substance of whatever kind or description and whether or not it is of value.” All violations of Kentucky’s litter laws (including roadside littering, illegal dumping on one’s own or another’s property, and littering in public waters) are misdemeanor offenses. Not surprisingly, law enforcement response to the problem is commensurate with the seriousness assigned illegal dumping by the state legislature.

FIGURE 1. FAST FOOD PACKAGING, BOTTLES AND CANS LITTER KENTUCKY’S ROADSIDES.



The specificity of the state statute, however, is especially germane to rural Kentucky whose byways, highways and waterways are strewn heavily with fast food packaging, cans and bottles. In fact those items comprise most of all roadside litter. According to the Solid Waste Coordinators of Kentucky, 54 percent of rural road and 43 percent of urban road litter are bottles and cans (the bottling industry refutes this by claiming a paltry 8.6 percent). Evidence supports the coordinators' claim. A two-year examination of 600 miles of Kentucky's roads showed that 950 cans and bottles had been discarded per road mile (Kentucky Resources Council 2001).

The roadside littering problem has not gone unnoticed by the state legislature. In fact, during two consecutive sessions the General Assembly attempted to control roadside litter with legislation that required a deposit on beverage containers (glass, aluminum, plastic) and a one-quarter cent advance disposal fee on fast food packaging. Furthermore, the bills required that each county provide for universal curbside or driveway collection of all municipal waste using an advance collection of garbage fees by including them in property taxes. The bills proposed that money be allocated specifically for solid waste collection efforts, to clean up abandoned landfills, to promote recycling, and to fund statewide clean up of illegal open dumps and anti-litter education programs. The bills were supported by various conservation groups, the Kentucky Farm Bureau and the state's solid waste coordinators. Powerful lobbyists, however, opposed the legislation. On both occasions the Kentucky Chamber of Commerce, the Associated Industries of Kentucky, and the Kentucky Retail Federation lobbied against arguing (as ludicrous as this sounds, this was the rhetoric during the debate) that if the bills passed, Kentuckians would drive across the state border to purchase their Mountain Dew. In each case, the bill was defeated.

Apart from roadside littering, the Kentucky legislature has addressed the illegal dumping problem as well but, to date, without delivering prevention education, law enforcement and criminal sanctions necessary to affect the problem significantly. For example, In 1991, the General Assembly enacted a universal collection system but did not require residents to participate. Although 24 states require a surcharge on the "tipping fees" paid at landfills (these fees allow garbage haulers to dump in the landfill and raise revenue for the state's clean up operations), Kentucky is not among them although 75 percent of Kentuckians reportedly support a state-levied surcharge (Kentucky Long-Term Policy Research Center 2007).

Then, during the 2002 General Assembly, legislation was passed addressing solid waste reduction, recycling, educational efforts, collection and disposal of solid waste, elimination of illegal dumps, the closing of abandoned landfills, and litter abatement. Then, in 2006, a trust fund—Kentucky Pride—was established to provide grants to counties for eliminating illegal open dumps and for establishing recycling and hazardous waste programs. Counties solicit bids from private companies for these clean up operations. Economically distressed counties rely on these newly created grants for clean up efforts. Of course, preventing new open dumps is another matter and one that most counties are ill equipped to address.

On a positive note, Kentuckians, in increasing numbers, participate in residential trash pick up. Furthermore, state law requires that counties report their progress at eliminating illegal dumping and their efforts at educating their residents (Kentucky Long-Term Policy Research Center 2007). Some counties, apart from state initiatives and legislative efforts, have made inroads at addressing illegal dumping. Today, 28 Kentucky counties (23 percent) require participation in garbage collection. Garbage pickup, both mandatory and voluntary, is now the primary means of trash disposal in 109 counties (90 percent).

Despite legislative efforts at addressing these problems, illegal large and small scale dumping remains a major social problem within rural Kentucky.

#### SOCIAL, ECONOMIC AND ENVIRONMENTAL HARM

Kentucky produces nearly 17 million pounds of garbage daily. Although 83 percent of households participate in trash collection, the remaining 17 percent, who do not, produce about 3 million pounds per day. Just how they dispose of their household garbage is unknown although methods such as burning it in their backyards, dumping it down a hillside behind their homes, or driving it to and dumping it in an illegal open dump are the most common methods. Each presents problems for Kentucky and Kentuckians.

Open dump sites and roadside trash are ongoing and costly problems in Kentucky and particularly within rural areas. About \$4 million per year is spent to clean up roadside litter alone. The cruel irony is that a roadside cleaned up today will require cleaning up again tomorrow. Littering, appropriating money, and using it for clean up operations seem never to end. Beyond Kentucky's roadsides, another \$2.9 million per year is spent cleaning up illegal open dumps (Kentucky Division of Waste Management 2007). Large-scale illegal dumping is particularly costly to local governments. Since 1993, Kentucky has cleaned up 22,937 illegal open dumps



FIGURE 2. ONE OF KENTUCKY'S MANY OPEN HILLSIDE DUMPS.



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(an average of 1,764 per year) at a cost of \$57 million dollars (Kentucky Division of Waste Management 2006). The costs of clean up and proper disposal operations, like those from roadside trash clean up efforts, ultimately are passed along to Kentucky residents, landowners, and tax payers.

Illegal dumping adversely affects land, water, humans and non-humans. Illegal dumping interferes with runoff and drainage. Dumped waste blocks creeks, culverts and other drainage ways. Flooding often results. Runoff from illegally dumped toxins such as motor oil, herbicides, paints and household cleaners contaminate streams, lakes, wells, ground water, and drinking supplies. Dumped appliances are especially harmful. Refrigerators and freezers release chlorofluorocarbon (CFC)

FIGURE 3. DISCARDED TIRES LITTER KENTUCKY'S CREEKS AND STREAMS.



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into the air. Those built before 1979 leak polychlorinated biphenyls (PCBs) into surrounding soil (and ultimately ground water). PCBs are known carcinogens and cause hormone imbalances and reproductive failure. The Environmental Protection Agency estimates that one television set that is not properly recycled, releases about eight pounds of lead—another known carcinogen—into the environment.

Burning household trash is illegal in Kentucky but enforcing such ordinances, like those controlling dumping and littering, is next to impossible. Burning creates air born toxins (especially from burning plastics) and produces noxious odors for neighbors. Ignoring that we all live downstream, or in this case, downwind, some rural Kentuckians nonetheless burn household trash with impunity.

The presence of illegal dumps and roadside litter affects residents' property values. It affects residential and commercial development, the latter of which is especially salient for local economies too often based on a single industry or manufacturer. Indicative of the cycle of underdevelopment and poverty, without economic development at some level, and especially in poor, rural counties, the public funding of legal dumps or mandatory trash pick up is often beyond a county's means.

FIGURE 4. ILLEGALLY DUMPED FURNITURE BLOCKS KENTUCKY'S STREAMS AND CREEKS.



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#### SOCIAL DISORGANIZATION OF RURAL COMMUNITIES

Kentucky's poverty problem is entrenched. In some rural counties, the poor, for the most part, are socially isolated and live in houses in disrepair or more commonly, in trailers (mobile homes). The number of trailers has grown markedly across the U.S.—at four times the number of one-family houses (Duncan and Lamborghini 1994). Granted, some increases are due to individuals buying a second recreational dwelling (e.g., in Florida) but, most trailers house poor people living in poor rural states. In Kentucky the number of trailers increased more than 62 percent during the past two decades and accounts for more than 13 percent of all residential dwelling places (Bureau of the Census Statistical Brief). Trailer dwellers have household incomes approximately \$10,000 below the national median. Like many discarded items that remain public eyesores for years on end, trailers contribute to the litter problem.

Worn out, abandoned trailers, left to the glacial process of rusting away and returning to the earth, like dumped appliances, discarded mattresses, and junk cars further pollute the social landscape and adversely affect local economies



FIGURE 5. ABANDONED TRAILERS LITTER THE PUBLIC LANDSCAPE.



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The resulting situation in many Kentucky counties is effectively a two-class system with a relatively small middle class and public sector providing few infrastructural services. Many rural Kentuckians must make do with poor health care, few and voluntary emergency services, and little public support for open dump and roadside trash removal. In poor rural counties, existing garbage services, privately owned, operate as monopolies with the cooperation of locally elected officials and often charge monthly fees above the state average (Personal Interviews). Ironically, Appalachian Kentucky, despite its status as the poorest area in the state, nonetheless has led the way in adopting mandatory trash collection participation strategies (Kentucky Long-Term Policy Research Center 2007).

Furthermore, poor, rural communities' local resources are stretched thin as increasing demands are placed on limited public revenue. Much of the demand results from population growth from the in-migration of ex-urban and suburban dwellers. In Kentucky, rural communities adjacent to cities are experiencing post-agrarian development as newcomers buy large tracts of land for development or purchase newly constructed houses on five or so acre tracts. Countryside and small towns within Kentucky's once agriculturally productive settings are becoming "organized by consumption priorities" rather than agricultural production (Salamon

FIGURE 6. ILLEGALLY DUMPED CARS ON PRIVATE LANDS ARE COMMON THROUGHOUT RURAL KENTUCKY.



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2003:3,11) as one-time farm land is “developed” into expensive housing subdivisions and strip malls. New residents’ expensive housing developments are transforming one-time farm land into McMansion housing subdivisions—a disturbing juxtaposition to now decrepit farm houses and increasing numbers of mobile homes.

Such rural population growth contributes little to public coffers as newcomers work and shop elsewhere. The effect is especially troublesome for existing public services as rural counties and small towns must manage more with less revenue. Although newcomers’ houses are quite expensive, public revenue generated from them often fails to compensate for the increased demands placed on local governments responsible for providing public services. In fact, research shows that for every dollar of tax revenue generated by new suburban developments, \$1.11 of public money is spent providing services to them (Esseks, Schmidt and Sullivan 1998; Weisheit, Falcone and Wells 2006). Such negative gains from in-migration complicate open dump and roadside litter clean up operations and further strains anti-litter efforts.

Social disorganization is recognized in various activities and places. For example, Kentucky, a rural state, nonetheless has witnessed dramatically higher crime rates today than during the “crime wave” of the 1960s. In fact, crime, in Kentucky, has increased 131 percent since 1960. Also, drug arrests have skyrocketed by 266 percent since 1980. Likewise, arrests for methamphetamine production in private homes, on public lands, and in mobile laboratories have increased (Donnermeyer and Tunnell 2007; Kentucky State Police 2007). Each of these social problems, along with illegal dumping, suggests social disorganization within Kentucky.

FIGURE 7. ILLEGALLY DUMPED MATTRESSES POLLUTE KENTUCKY’S WATERWAYS.



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Social disorganization theory emphasizes stability and social integration as necessary conditions for a community’s health. Population change “exerts a destabilizing effect on local social control networks” and community social organization (Barnett and Mencken 2002: 373). New arrivals remain disconnected from community and their agrarian neighbors. They are not well integrated. They do not participate in local economies of work or leisure. Long-term residents may

come to feel less fully integrated given such fundamental changes as, for example, large scale immigration, small business closings, the demise of family farming, increases in mobile homes and their county's inadequacy at addressing social problems such as roadside and open illegal dumping. Furthermore, with increasing demands on public revenue for services such as road and water and fire and police protection among others, specific manifestations of social disorganization – such as illegal dumping–threaten rural residents' sense of community (Tunnell 2006).

Well integrated, socially organized neighborhoods enjoy intimate relationships among residents and high levels of collective efficacy (Sampson, Raudenbush and Earls 1998: 1). Disorganized communities lack collective efficacy that impedes their ability to address their commonly shared problems. They do not enjoy extra-community ties to offices and agencies necessary for obtaining government resources. They have little collective ability to win the attention of or to get services and resources from local governments already strained by poor public revenue and increasing demands for public services (Barnett and Mencken 2002). This is particularly relevant to poor, rural communities needing public support for addressing the illegal dumping problem (among others).

Two examples are noteworthy. Residents of one rural and economically distressed Kentucky county began displaying their automobile license plates upside down as a recognized indication of distress. Residents acknowledged that their social problems (e.g., illegal dumping, poorly funded schools, poor local health care services) were going unaddressed by local officials. A movement to draw attention to their distressed state materialized with the license plate display. Nevertheless, rather than address the county's collective problems, local authorities merely cautioned drivers to post their license plates right side up (Personal Interview).

Across Kentucky the wholesale roadside dumping of trash, with little government effort to prevent it, is common. More common is small-scale, yet cumulative, littering–cans, fast food wrappers, and bottles–tossed from the open windows of cars and trucks. Here too, rural residents' petitions for help from their local governments in collecting roadside trash or having “No Littering” signs posted are often dismissed–an indication of rural dwellers' political impotence. In one rural county locals requested the posting of “No Littering” signs but were told by public officials that doing so would be ineffective since residents in that area are “just ignorant” (Personal Interviews).



Given their ineffectiveness at garnering public officials' help, socially disorganized communities, with little collective efficacy and inadequate public resources, have few options for remedying illegal dumping and roadside litter.

## CONCLUSION

Rural dumping and littering, a significant problem for Kentucky, will remain so if legislation fails to address the problem adequately and if local officials disregard citizens' concerns about and solutions to these issues. Furthermore, allowing housing and business development with little thought to how local communities and public coffers will be affected is poor planning that likewise needs reconsideration. The inability to accomplish what residents of other states have done—implement bottle deposit legislation, mandatory trash and recycling programs—suggests social disorganization and communities' limited collective efficacy.

Kentucky's rural and poor status further complicates its problems. Within rural areas, manifestations of social disorganization occur out of sight. In such areas, dumping an old appliance or household garbage, poaching animals, growing marijuana, manufacturing methamphetamine, or simply ignoring local ordinances is easy. These activities occur more easily in locations without potential observers. Given the poor status of Kentucky's rural counties and their residents, the motivation to dispose of household garbage or old appliances illegally, especially among those without adequate means of properly disposing of them, is not surprising. Local governments within disorganized Kentucky communities are financially unable or politically unwilling to provide proper means of disposing of trash, toxins (such as paint and household cleaners), and old, dilapidated appliances. This combination—rural poverty and poor government—makes possible the social problems described in this paper. At the core of these issues is the realization that many Kentucky counties, and especially those that are rural and poor, are socially disorganized and are in need of social solutions to their problems.

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