

THESIS

ROCKY MOUNTAIN HIGH:

AN ENVIRONMENTAL HISTORY OF *CANNABIS* IN THE AMERICAN WEST

Submitted by

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In partial fulfillment of the requirements

For the Degree of Master of Arts

Colorado State University

Fort Collins, Colorado

Summer 2014

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ABSTRACT

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Drugs are plants, too. Every ounce of tobacco, cocaine, heroin, marijuana, alcohol, or even coffee consumed in the United States today is the result of a profound human-plant relationship. The history of these relationships tells us much about how these plants have figured into human history and the human condition. It also illuminates how these plants went from being coveted elements of seductive nature to their current status as controversial and illicit commodities. The general revulsion with which we currently approach drugs, the people who use them, and the plants that produce them has effectively obscured the important place of drugs and drug plants in history.

Current histories of *Cannabis* in the United States treat it first and foremost as the drug marijuana. But by foregrounding the plant that produces it—*Cannabis indica*—I am able to highlight the many important relationships Americans formed with it throughout the twentieth-century American West, and what these relationships tell us about drug plants and their place in our society. Examining these relationships not only provides fresh insights into relations of race, class, and gender in American history, but it also sheds light on under-examined topics such as cross-cultural contact, the buildup of traditional knowledge, the development of unofficial agriculture and commodity chains, and on the basic desires shared and pursued by all humanity.

ACKNOWLEDGMENTS

Even though I've only been working on this project for a year and half or so, I have accumulated a long list of people I need to thank for its completion. The staff at the Denver Public Library's History and Genealogy Department was always courteous and friendly, and its members showed me how to run the microfilm machines and provided me with newspaper clippings. Mason Tvert, director of communications for the Marijuana Policy Project in Denver, granted me an interview that helped me understand the modern legalization movement, and provided me with an extremely helpful CD of primary source material from Colorado. I could not have gotten this project off the ground without his help. Additionally, Eric Bittner and the rest of the archival staff at the National Archives at Denver showed me the ropes of research at the archives, and I was grateful for their help, cooperation, and friendliness. Lincoln Bramwell, chief historian for the U.S. Forest Service, took time out to gather and send me important data regarding marijuana growth on public lands, as well as set up an interview with Daryl Rush, Special Agent in Charge for the Forest Service. I am most grateful to Agent Rush as well for granting me an interview and providing key insights into the issue of marijuana growth on public lands. The folks at Newspaperarchive.com have put together and maintained an incredible collection of searchable newspapers, without which I could not have written this thesis. Dr. Greg Smoak, professor of history at the University of Utah, also took the time to relate via e-mail his fascinating story of the hidden marijuana grow room he found in his old Fort Collins house. Drs. Joe Horan of Colorado School of Mines and Jim Giesen of Mississippi State University, as well as the other ph.Ds and doctoral candidates I met at the Southern Forum on Rural, Agricultural, and Environmental History, also provided crucial feedback on this project. At Rollins College,

Claire Strom and Annabel Tudor, editor and managing editor of *Agricultural History*, thought well enough of this project to invite me down to Florida for SFARE, and I thank them for their support and encouragement. They were also gracious hosts to my wife and I during our stay in Winter Park.

While working on this project at Colorado State University, I was also lucky enough to be studying with and under some of the brightest minds I've ever had the pleasure of knowing. In Fall 2012, Dr. Mark Fiege had our cohort read Edmund Russell's *Evolutionary History*, a book that forms the intellectual backbone of this project, and other books that introduced me to the extraordinary field of environmental history. Since then, Mark and I have shared many inspiring conversations, ideas, and laughs. When my writing bogged down into academic jargon, or when it sounded too much like that of a starry-eyed grad student, he was often the first person to tell me to put aside the technical tone and simply use my own voice. It's hard to come by a better piece of writing advice. Though he is an intensely overcommitted man, Mark read every page of the first draft of this thesis and provided me with much-needed encouragement, enthusiasm, honest criticism, direction, and food for thought.

Dr. Jared Orsi also carefully read every page here, and has probably done more to improve my writing than anyone I've ever worked with. I am grateful for his consistent, honest feedback, his repeated encouragement, and the high standards he maintains for me and all the other grad students here. I'm also grateful to Jared for being my guide to the graduate school experience at CSU. He was the first person I made contact with at Colorado State, and every interaction I have had with him since has proven that his intelligence, concern for students, and kindness know no bounds. I have no doubt that Jared's letter of recommendation to History Colorado strongly influenced its editorial staff's decision to publish a part of this project this

summer in *Colorado Heritage*. I consider both Mark and Jared not only my mentors and model historians, but also my friends. Dr. Adrian Howkins and I had wonderful and enlightening conversations during my independent study on Latin American environmental history this spring, all of which helped me wrap my head around the field and build insight into this project. I consider Adrian a mentor and a friend as well. Dr. Michael Carolan, chair of the CSU Department of Sociology, taught a stirring and enlightening class on agriculture and food systems. In our conversations in and outside that class, and as the out-of-department member on my thesis committee, Michael has proven to be one of the most encouraging, knowledgeable, and cheerful people I've worked with. Drs. Janet Ore and Sarah Payne also gave me encouragement and helped me gather books and other resources. Other CSU faculty who helped inform my thinking on this project include Drs. Nathan Citino, Jodie Kreider, James Lindsay, Ann Little, and Thaddeus Sunseri. Within my cohort at CSU, Zach Lewis gave constructive feedback on parts of this project. Conversations with and feedback from Zach, Naomi Gerakios, John Kochanzyk, Jason O'Brien, Joel Scherer, Dan Rypma, and Jacquelyn Stiverson have helped me better wrap my head around this project. I'm also grateful to my *Cannabis*-growing friends in Fort Collins, who through casual conversation have helped shed light on their unique horticultural endeavors.

My family in Chicago has encouraged and supported me in this project from the beginning. Last and most importantly, Nancy Gonzalez-Johnson has put up with the tremendous amount of time I've put into this project, and through our conversations about it, she has helped shape my thinking on it as well. Always a critical and attentive listener, she pulled no punches as she listened to me read my introduction out loud time and again. I didn't always make things easy on her, but without Nancy's understanding, patience, honest criticism, encouragement,

support, and above all, love, I wouldn't have been able to get up in the morning, much less write a master's thesis. It is to her that I dedicate this and all of my future works.

PREFACE

A Note on Methodology and Sources

I obtained most of the primary source material for this project from newspaper collections, either online, microfilm, or clippings. These were accessed through a subscription to NewspaperArchive.com, and the Denver Public Library's Western History and Genealogy Collection. Other sources include court case documents from the National Archives and Records Center in Denver, and audio recordings and written transcriptions of personal interviews.

References to *Cannabis indica* and marijuana do not begin to appear frequently in American newspapers until the end of the nineteenth century. From about 1900 to the early 1930s, most articles in Western newspapers about *Cannabis* were overtly sensationalist. Then, as white, middle-class youth took up marijuana in the mid-1930s, reports still had racial overtones but focused more on deliberately vilifying both the plant and *all* the people growing, selling, or smoking it. These reports are problematic to the historian because the claims they make about the plant and its human affiliates advance the cause of prohibitionists. Thus, claims on the social and physiological effects of the drug must be taken with a grain of salt. I tried to look at basic facts from these articles that journalists and law enforcement at the time had no reason to manipulate—such as where a crop of plants was found, how it was watered, names and occupations of those arrested, or what was found at the scene.

An additional problem with this early source base is a result of the very history I write about here; almost no one in journalism, law enforcement, politics, or even botany knew that drug and fiber *Cannabis* varieties are completely different subspecies until the last decade or so. Wild and cultivated varieties of *Cannabis sativa* (hemp) were widely present in Mexico and

California from the eighteenth century, and *C. sativa* seeds were used in birdseed shipped all over the American West. *Cannabis indica*, the tropical marijuana plants that Mexicans brought stateside in the early twentieth century looked much like the hemp plants that could be found in many places in the West. Law enforcement often conflated hemp with marijuana, though it is likely that very few people were wrongly convicted because of this. This confusion, in addition to insufficient contemporary knowledge about the plant, makes many of these early newspapers' claims about the effects and speciation of drug *Cannabis* untenable, although some reports were more accurate than others.

Newspapers in the latter half of the century take a more neutral stance on *Cannabis*, though it is clear from editorials and letters to the editor, at least in mainstream magazines and newspapers, that the majority of the public is still anti-marijuana. Yet this is the period where a pro-marijuana, pro-*Cannabis* section of the American counterculture began printing its own newspapers, and magazines like *High Times* appeared. These sources can have some of the same flaws as the earlier reports. The claims made by neutral or pro-marijuana sources also must be cross-checked with current scholarship on the plant, because they may at times be inaccurate or exaggerate the potential benefits of *Cannabis*.

In addition to newspapers, I combed through dozens of court case reports from the early part of the century at the National Archives and Records Agency in Denver, Colorado. Many of these cases did not tell me much; I used the most complete files for this project (see stories of Leo Acosta, Manuel Hernandez). I did not keep a formal tally system—a rookie research mistake—for how many cases I went through, but I estimate that I looked at about 100. Though I did not have time or money to review court records from other periods and other states, that will certainly be the next logical step in expanding this project.

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Introduction

Of People and Plants

From a satellite image, southern Humboldt County's slice of the northern Californian coast looks more like a tropical jungle than a temperate forest. An undulating, verdant stretch of land, it is bordered on the east by the Eel River and on the west by the formidable King Range, which drops off sharply into the Pacific Ocean. Its carpet of coastal redwoods and firs, unbroken by large settlements, conceals a rocky, wrinkled face of foothills, leaving golden archipelagos in a sea of green. The region is crisscrossed by seldom-traveled, winding roads and meandering streams. For anyone who wants to disappear, the rugged, conifer-covered hills west of Garberville, California provide a perfect place to do it.

In the 1960s and '70s, groups of Americans across the country who called themselves hippies wanted to disappear. Fed up with what they saw as a phony and corrupt national culture, they eschewed social norms for bathing, dress, and hair length, and they took drugs avidly. The press and politicians pegged them for dirty, drug-peddling slackers, and they were pushed out of many cities by intolerant neighbors and authorities. Many hippies realized that to continue their way of life, they would need to create a space for themselves outside mainstream society. By the summer of 1973, a group of them in northern California had carved out a rustic set of homesteads in that rolling, emerald wilderness west of Garberville.¹

But they didn't just conceal themselves; they also concealed an illicit crop. The American counterculture had from its founding taken to smoking marijuana, the dried leaves and flowers of

¹ Timothy Miller, *The 60s Communes: Hippies and Beyond* (Syracuse: Syracuse University Press, 1999), 67-8, 151-53; "3,000 marijuana plants confiscated, nine arrested in raid by deputies," *Eureka Times Standard*, August 22, 1973.

Cannabis indica, a tropical, wind-pollinated, annual herb.² Although the plant’s ancestor, the non-drug *Cannabis sativa*, or hemp, had entered the American landscape long before the twentieth century, *Cannabis indica* was a relatively new introduction; the drug plant arrived in the American West via Mexican immigrants at the turn of the century. In the ensuing decades, despite being outlawed by legislatures and producing much public anxiety over its presumed effects, *Cannabis* smoking gradually crossed into white American culture. By the 1950s the beatniks, an earlier counterculture, began growing and smoking the herb, enjoying its relaxing buzz that elevated the mood and opened the mind. And of course, beats and hippies, like the Mexican immigrants before them, found that tropical *Cannabis indica* was well-suited for many of the climates and landscapes in the American West.

In their attempts to escape what they saw as a mundane American reality, these social outliers tried many drugs, but marijuana emerged as the favorite.³ This was not an accident. The *nature* of *Cannabis*—the neurobiological effects of its resin, and the plant’s exceptional environmental adaptability—made marijuana a desirable, cheap, and easy-to-obtain substance. This meant it was the perfect drug for a peace-pushing, anti-establishment people. Thus, it is hardly surprising that in 1973, tucked away under the rugged, natural cover of northern California’s coastal forest, some 3,000 carefully cultivated *Cannabis* plants grew in designated patches, hothouses, and in between vegetables on the hippie homesteads west of Garberville.⁴

However, in the weeks leading up to August 21, 1973, some of these hippies and their neighbors began sensing that neither they nor their plants were as detached from society as they thought. The loud drone of an airplane, barely missing the treetops as it soared above their heads,

² Robert C. Clarke and Mark Merlin, *Cannabis: Evolution and Ethnobotany* (Berkeley: University of California Press, 2013), 13-16; Martin A. Lee, *Smoke Signals: A Social History of Marijuana—Medical, Recreational, Scientific* (New York: Scribner, 2012), 73, 96.

³ Miller, *The 60s Communes*, 6.

⁴ “3,000 marijuana plants confiscated...”

became a regular and worrisome noise.⁵ It came again on the twenty-first; only this time it was accompanied by a platoon of twenty-six Humboldt County sheriff's deputies. With guns drawn and only a single warrant, they kicked in doors, smashed windows, pulled up *Cannabis* plants, destroyed vegetable gardens, and clapped nine homesteaders in handcuffs.⁶ Such was the way law enforcement viewed the hippies' relationship with a particular plant.

Lies My State Told Me

By the 1970s, every level of government in the United States was disturbed by the hippies' relationship with *Cannabis indica*. A fair question to ask is why—why the hippies, and why *C. indica*? To be sure, other Americans had by then developed disturbing relationships with other plants. In well-meaning attempts to keep farming profitable and feed the world—in part so that communists couldn't—American agricultural policy had since the 1940s favored large, mechanized farms that dumped huge amounts of fertilizers and chemicals onto monocultures of corn, wheat, and other staple crops.⁷ The massive space these industrial farms required was obtained by clearing native vegetation or busting up native sod; in many cases, the planting of these large farms was a veritable plant holocaust, as farmers and machines wiped out a field's botanical diversity and replaced it with a “pure” monoculture that harbored few defenses against diseases and insect pests. Where there wasn't enough rain, monocultures were watered by irrigation systems that were effective, but also costly and wasteful. Sometimes, weed-wary and pest-paranoid, farmers sprayed too many chemicals on their plants, and rain or irrigation washed the chemicals into the ground and into rivers and lakes. Moreover, many small or medium-sized family farms that grew food without embracing these damaging and wasteful practices, or those

⁵“Property owners seeking information on marijuana raids,” *Eureka Times Standard*, August 25, 1973.

⁶“Allegations against sheriff's deputies brought up in county budget meeting,” *Eureka Times Standard*, August 29, 1973.

⁷Michael Carolan, *The Sociology of Food and Agriculture* (New York: Routledge, 2012), 57, 74; Angus Wright, *The Death of Ramon Gonzalez: The Modern Agricultural Dilemma* (Austin: University of Texas Press, 1990).

could not afford expensive inputs like herbicides, had little hope of competing; they were crushed by Big Ag. Without a doubt, modern agriculture in the 1970s —the kind of human-plant relationship that the U.S. government wholeheartedly endorsed and defended—was far more disturbing and unnatural than a couple dozen hippies smoking grass in the woods.

Even state-approved *recreational* relationships with nature came with baggage. The National Parks, large tracts of “wilderness” that had been systematically taken and depopulated by the U.S. government, served up the Indians’ former homeland as recreational nature.⁸ And even on public lands, the state enforced boundaries. People who came to bird-watch or hike fell within the state’s definition of legitimate visitors, but those who came to gather firewood for a rural community were seen as trespassers.⁹ For both people and nature, the parks functioned as sanctuaries *from* civilization, but they were very much unnatural creations *of* it.

Like the hippies, there were those who pushed back against these state-approved relationships between nature and people. Beginning in earnest with Rachel Carson’s *Silent Spring* in 1962, many Americans were already pointing out the harmful environmental effects of U.S. agricultural practice.¹⁰ In October 1966, some four hundred Hispanic villagers in northern New Mexico laid their own claims to land in the Carson National Forest—claims legitimized by the 1848 Treaty of Guadalupe Hidalgo—by staging an armed occupation of a Forest Service campground.¹¹ But at the level of policymaking, these complaints largely fell on deaf ears; lawmakers believed that by applying science, engineering, and a great deal of good old-fashioned force to the landscape, the modern state had already mastered nature, and so had the

⁸ William Cronon, “The Trouble with Wilderness,” in William Cronon (ed.), *Uncommon Ground: Rethinking the Human Place in Nature* (New York: W.W. Norton, 1996), 79.

⁹ For examples of resource use tension between rural residents and the U.S. Forest Service, see Jake Kosek, *Understories: The Political Life of Forests in Northern New Mexico* (Durham: Duke University Press, 2006).

¹⁰ Rachel Carson, *Silent Spring* (Cambridge, Mass.: Riverside Press, 1962).

¹¹ Kosek, *Understories*, 42-3.

authority to determine what constituted an appropriate relationship with it.¹² Yet, the examples of Big Ag and the National Parks show that the state's judgment on that issue was questionable. So what did it have against *Cannabis*?

The federal government outlawed *Cannabis* in 1937, after decades of sensational folklore surrounding marijuana use by African-Americans and Mexicans had sufficiently penetrated the psyche of the white middle class. Then in the late sixties, the disruptive counterculture had riled up the Nixon Administration and conservatives everywhere, and marijuana was lumped with heroin as a highly addictive and dangerous—Schedule I—drug under the 1970 Controlled Substances Act.¹³ So, in the eyes of the American state in 1973, the Humboldt homesteaders were not only living non-productive lives off the profitable and polluting grid; they were also breaking the law by growing and indulging in the *wrong* kind of recreational nature.

Cannabis, however, is not highly dangerous, nor is it physically addictive, just as modern agriculture has not helped save the world (or even the U.S.) from widespread hunger. File those claims under “Lies My State Told Me.” The hippies, of course, couldn't have cared less what the state thought of them. In their eyes, the whole American grid—with its paved roads that squared off mechanized farms, its neatly edged lawns that split the suburbs into identical plots of tract housing, and its false promise of prosperity for all who lived on it—was a mind-deadening landscape of forced conformity. Marijuana, by contrast, opened the mind to new perspectives and alternative thoughts, and put the brakes on an American world that seemed to spin at breakneck speed.¹⁴ The state spent so much time and money influencing plants—the hippies allowed plants to influence *them*. And, though commune-dwellers generally eschewed the idea of

¹² James C. Scott, *Seeing Like a State: How Certain Strategies to Improve the Human Condition Have Failed* (New York: Vail Ballou Press, 1998).

¹³ Lee, *Smoke Signals*, 118-121.

¹⁴ Miller, *The 60s Communes*, 6.

money, communes still required a certain amount to function, and growing *C. indica* was a good way to bring in cash.¹⁵ For pleasure, for philosophy, and for profit, hippies filled in the blank spaces of the American grid—vacant city lots, out-of-the-way cabins, and communal gardens—with *Cannabis indica*.

Coevolution: Making a *Cannabis* Revolution

The hippies' off-the-grid growing is just one of many important relationships that Americans formed with *Cannabis indica* during the twentieth century. In that time, not unlike corn, wheat, or soybeans, *C. indica* “coevolved” with culture in the American West.¹⁶ The plant's cultural journey saw it go from the demonized “narcotic” of laboring Mexicans and jazz-playing African Americans, to the darling of the counterculture, and finally to a legitimate medicine and a popular recreational drug. Within that process, *C. indica* itself also underwent changes. To satisfy the demands of a marijuana culture that had been building for decades, American growers in the 1970s and '80s merged ancient cultivation techniques with modern technology to invent thousands of new subspecies of *C. indica*, each one producing its own unique marijuana.¹⁷

All of these changes in plant and society occurred *outside, despite, or because* of the legal and moral boundaries set by the government and a drug-anxious public. The hippies chose to live *outside* those boundaries—although, as the 1973 case shows, they couldn't always escape them—but they weren't the first group of Americans to develop an important relationship with *C.indica*. In the first part of the century, many Mexican immigrants grew marijuana *despite* a strong cultural taboo and laws that forbade its production. Some grew marijuana because it

¹⁵Ibid., 162.

¹⁶ Edmund Russell, *Evolutionary History: Uniting History and Biology to Understand Life on Earth* (Cambridge, Mass.: Cambridge University Press, 2011), 85-102.

¹⁷Lee, *Smoke Signals*, 176.

helped them relax or functioned as a home remedy for common ailments like rheumatism.¹⁸ But selling the herb could also supplement their income, so some grew it *because* class or racial prejudice kept them from higher-paying jobs beyond crop fields and railroad yards.

Indeed, in the first few decades of the twentieth century, large-scale marijuana operations run by Mexican immigrants sprouted in many places across the American West. In 1940s Colorado, Manuel Hernandez grew more than \$60,000 worth of marijuana, and his operation secured a standard of living for him and his family that was beyond the reach of most immigrants.¹⁹ He was not the only one. Large marijuana operations could be found in places like Clearfield, Utah, where Reficio Castello and two others were caught harvesting a \$20,000 crop in 1931, or Sacramento, California, where Tony Jiminez was shot to death defending his \$5,000 crop from police in 1934.²⁰ But more common were instances involving smaller or personal amounts of marijuana, as in the case of Mereciano Vigil or Salvador Ybarra. Vigil, a beet harvester in Las Animas, Colorado, was caught with a can of marijuana in 1937 and told police that smoking the drug “kept him from getting tired” in the field; Ybarra was caught with three cans of marijuana, presumably for sale, in a camp near Tacoma, Washington, in 1938.²¹

For decades, these people and their plants appalled white authorities and lawmakers in Western states, as well as the general public. But eventually, white Americans, perhaps as curious customers or observers of the marijuana trade, absorbed some of Mexicans’ traditional knowledge of *Cannabis* and its cultivation. In the decades following the 1920s, an increasingly

¹⁸ “Jury Frees Mexican in Marijuana Case,” *Greeley Daily Tribune*, February 19, 1958; Clarke and Merlin, *Ethnobotany and Evolution*, 248.

¹⁹ “17 Held as U.S. Agents Claim Smashing of Dope Ring That Preyed on Boys, Girls,” *Rocky Mountain News*, January 12, 1941; “\$60,000 Marijuana Confiscated, And Alleged Wholesaler Arrested,” *Rocky Mountain News*, June 13, 1946.

²⁰ “Sheriff Raids Narcotics Farm; Arrests Three,” *The Salt Lake Tribune*, September 5, 1931; “Marijuana Ring Suspect Shot,” *Oakland Tribune*, January 24, 1934.

²¹ “Marijuana is Found on Mexican Worker,” *Las Animas Leader*, October 13, 1937; “Narcotics Seized,” *Centralia Daily Chronicle*, February 3, 1938.

diverse segment of Americans began smoking marijuana. While most of the demand was met by imports from Mexico, there were also many domestic cultivators.²² It was a weedy plant that often found a home in the “vernacular landscape,” the lived-in one, the one between the lines of the official grid.²³ In backyards, cornfields, vacant city lots, or on out-of-the-way stream or ditch banks, these early growers informally created an entire system of outlaw agriculture across the West. Then, in the 1950s and 1960s, the counterculture adopted marijuana and catapulted it into popularity—or, in the eyes of the government, infamy. Before it was even on the continent for a century, the nature of *Cannabis indica*, the plant that grew so well in so many places in the West, and offered its human stewards cheap, relaxing intoxication, allowed it to spread across North America.

But the illicit landscape of marijuana growers, dealers, and smokers, and the authorities that pursued them, do not represent everyone affected by the *Cannabis* trade in the West. Concerned citizens campaigned against *Cannabis* in local clubs and in newspapers. There were also many who had never seen or smoked the plant, but were nonetheless roped into marijuana-related affairs. For example, the majority of marijuana growers were men, and if they were arrested their wives and children could be left without a provider.

This is not to say that women did not grow *Cannabis* or participate in the black market. Women sometimes co-ran operations with their husbands or led marijuana rings themselves.²⁴ Some, of course, also smoked marijuana, although not as many as men. On the other side,

²² Jim Rendon, *Super Charged: How Outlaws, Hippies, and Scientists Reinvented Marijuana* (Portland: Timber Press, 2012), 33.

²³ J.B. Jackson, *Discovering the Vernacular Landscape* (New Haven: Yale University Press, 1984).

²⁴ “Pair Arraigned on Marijuana Charges,” *San Mateo Times*, December 12, 1936; “Dopesters’ Dame,” Photo, *Long Beach Independent*, July 30, 1949; “Mother of 3 Arrested on Dope Charge,” *Star News* (Pasadena), April 24, 1958.

members of women's groups in Montana gave presentations on the "evils" of the drug.²⁵ In the 1930s, Elizabeth Wright, world-traveling anti-drug activist, continued the work of her late husband and campaigned against marijuana for the Federal Bureau of Narcotics.²⁶ Some women, like Nancy Hernandez, found themselves victimized by the irrational nature of the drug war. In 1966, the young Californian mother was arrested for simply "being in a room where marijuana was smoked by others."²⁷ Hernandez was granted probation only if she agreed to be sterilized first.²⁸

Hernandez was one of many unfortunate people who found themselves tried as criminals because they had the wrong appearance, the wrong family ties, or were in the wrong place at the wrong time. World War II veteran Leo Acosta was another. Unlike his brother Malo, Leo Acosta had no connection to the marijuana trade. But he was still targeted by a sting in Denver, arrested, and sent to prison in 1948.²⁹ In 1970, 22-year-old Californian Patrick Berti was shot and killed by an undercover Humboldt County deputy, moments after he and a friend discovered two potted *Cannabis* plants growing on the Eel River.³⁰ Hernandez, Acosta, Berti, and the women and children who depended on arrested growers are but a few examples of the collateral damage caused by the government's overreaction to the illegal marijuana trade.

If the federal government was responsible for plenty of unnecessary suffering during *Cannabis* prohibition, it was also responsible for the most important shift in marijuana cultivation in the last several thousand years. In the 1980s, the Reagan Administration re-ignited the "war on drugs" on an unprecedented scale, using military tactics—and, in at least one case,

²⁵ "Club Meetings Feature Social Slate at Laurel During Last Week," *Billings Gazette*, January 23, 1938; "Local Woman is Club Head," *Billings Gazette*, February 25, 1938; "Miss Dora Young Discusses Drug Problem; New Junior Department Officers Elected," *Helena Independent*, April 13, 1952.

²⁶ Lemuel F. Parton, "Gallant Crusader Against the Marijuana Weed," *Kalispell Daily InterLake*, May 19, 1937.

²⁷ Lloyd Shearer, "Should this Woman be Allowed to Have More Children?" *Oakland Tribune*, August 7, 1966.

²⁸ *Ibid.*

²⁹ *United States v. Leo Acosta*, F. (10th Cir. 1948)

³⁰ "Berti's Killing Probed; Rites On Tomorrow," *Eureka Times Standard*, October 6, 1970.

actual military personnel—to invade and confiscate Americans’ private property.³¹ Besieged marijuana growers responded by moving their crop indoors, nurturing it under high-energy lamps and watering it with homemade irrigation systems. By assuming complete control over their plants’ environment, growers discovered they could determine its growth cycle and cross-breed different species; the result was literally thousands of new subspecies of *Cannabis indica*, all of which were more potent than their purely Mexican or Thai ancestors.³² Thus, the decision of the Reagan Administration to re-declare war on a segment of its own citizenry was a boon for *Cannabis indica*, its growers, and its users: the plant enjoyed a safer environment, guaranteed reproduction, and an increased, reliable supply of resources; the user enjoyed a better product; and the growers and distributors enjoyed higher profits. This was obviously a disaster from the standpoint of government officials, whose heavy handed tactics were designed to wipe the plant from the Earth, but only succeeded in pushing it off American landscapes and into American homes.

Further complicating enforcement, the feds had been hypocritical in their approach to marijuana since 1975, when they reluctantly agreed to provide glaucoma sufferer Robert Randall with medical marijuana from an experimental farm at the University of Mississippi.³³ For Randall, *Cannabis* was the only remedy that could prevent the inevitable blindness that usually occurs with his condition. But *Cannabis*, Americans were already figuring out, wasn’t just useful for treating glaucoma. From the 1970s through the 2000s, a plethora of studies, many commissioned by the federal government in attempts to prove once and for all that marijuana was harmful, linked smoking *Cannabis* to the treatment of myriad conditions: it relieved pain

³¹ Michael Pollan, *The Botany of Desire* (New York: Random House, 2001), 126-7, 129; Rendon, *Super Charged*, 73.

³² Rendon, *Super Charged*, 16, 18, 25.

³³ Lee, *Smoke Signals*, 141-2.

and inflammation associated with common ailments like cataracts, nausea, and arthritis, treated a more intense set of symptoms from conditions like multiple sclerosis, AIDS, seizures, and chemotherapy, and also helped with common psychological conditions, such as stress, anxiety, and the more severe Post-Traumatic Stress Disorder.³⁴

This is not to suggest that marijuana is a cure-all. In fact, studies so far have not proven it can *cure* any of these conditions, only that it is effective in treating their symptoms. And while there have been no recorded deaths attributed strictly to *Cannabis* consumption—there is no such thing as an “overdose” on marijuana—the drug is probably at least partly responsible for some accidental deaths due to the absent-mindedness it can sometimes cause. Inhalation of any kind of smoke irritates the pulmonary system; available studies suggest that regular *Cannabis* use does not impair lung function, and it has not been shown to produce emphysema or increase the risk of lung cancer.³⁵ That said, heavy, long-term *Cannabis* smoking can lead to unpleasant conditions like coughing, wheezing, or bronchitis.³⁶ At least two recent studies have also suggested that heavy *Cannabis* consumption by teenagers may result in some kind of cognitive or memory impairment later in life.³⁷ The results of these studies suggest that the effects of *Cannabis* can be far from harmless, but they are relatively benign in comparison to, say, murderous rage, psychosis, or any of the other outrageous and terrible effects the drug has been accused of inducing in the past.

³⁴Ibid., 145-7, 165-174, 202, 218, 229-30, 257, 280, 287, 291-3.

³⁵ Mitch Earlywine, *Understanding Marijuana: A New Look at the Scientific Evidence* (New York: Oxford University Press, 2002), 154-6.

³⁶Ibid., 154.

³⁷ M. J. Smith, D. J. Cobia, L. Wang, K. I. Alpert, W. J. Cronenwett, M. B. Goldman, D. Mamah, D. M. Barch, H. C. Breiter, and J. G. Csernansky, “*Cannabis*-Related Working Memory Deficits and Associated Subcortical Morphological Differences in Healthy Individuals and Schizophrenia Subjects,” *Schizophrenia Bulletin*, 2013; Sylvina Raver, Sarah Haughwout, and Asaf Keller, “Adolescent Cannabinoid Exposure Permanently Suppresses Cortical Oscillations in Adult Mice,” *Neuropsychopharmacology*, 2013.

Decades of research, combined with efforts by activist groups like the National Organization for the Reform of Marijuana Laws (NORML) and others, helped gradually shift the American public's perception of *Cannabis*. This shift became highly visible in the late twentieth century, when eight states, seven of which were Western states, legalized the growth, sale, and use of medical marijuana between 1996 and 2000.³⁸ Literally and figuratively, Americans were seeing the green "light"; if people could warm up to medical *Cannabis*, then with the right argument, in the right places, they might also sanction its recreational use. Indeed, a little more than a decade later, on November 6, 2012, Westerners in Colorado and Washington became the first two American constituencies to legalize recreational *Cannabis*.³⁹

As Westerners have done with other commodities in their history, the modern *Cannabis* industry turns a profit from nature. With a cumulative crop value as large as the potato and grape industries, *Cannabis indica* is one of the nation's most valuable cash crops.⁴⁰ Indeed, its profitability has contributed yet another chapter to the self-making mythology of the American West; people "rushing" West with their dreams and capital might strike green gold by growing *Cannabis*, but they are just as likely to fail in an ultra-competitive and heavily scrutinized market.⁴¹

Led by the West, Americans have over the last two decades knocked major cracks into the legal edifice of *Cannabis* prohibition. But even if the federal government were to legalize *Cannabis* indefinitely, there would follow, as with all important historical decisions, an entirely new set of challenges. With marijuana growth, these would include energy and water use—

³⁸ Kathleen Ferraiolo, "From Killer Weed to Popular Medicine: The Evolution of American Drug Control Policy, 1937-2000," *Journal of Policy History* 19 (April 2007): 147-179.

³⁹ Sadie Gurman, "Coloradans say yes to recreational marijuana," *Denver Post*, November 7, 2012.

⁴⁰ Jonathan P. Caulkins, Angela Hawken, Beau Kilmer, Mark A. R. Kleiman, *Marijuana Legalization: What Everyone Needs to Know* (New York: Oxford University Press, 2012), 39-41; Trish Regan, *Joint Ventures: Inside America's Almost Legal Marijuana Industry* (Hoboken, NJ: John Wiley & Sons, 2011), 70-71.

⁴¹ This is a common trope in the history of the American West. See Richard White, "*It's Your Misfortune and None of My Own*": *A New History of the American West* (Norman: University of Oklahoma Press, 1991).

particularly in the parched West—as well as friction between indoor and outdoor growers. Indoor growers have more control over their plants’ environment, which allows them to tailor their crop to various consumer preferences, like taste, smell, or effect. Outdoor growers, many of whom depend on marijuana production for their livelihood, do not have as much control over these aesthetic features, so may offer a product that is less marketable to consumers.⁴²

Whatever direction Americans choose to take *Cannabis* in the future, it will be shaped by their century-long relationship with the plant. During that time it has paid their bills, put them in jail, and dulled their pain. In its overzealous efforts to stamp out its use, the state made people like Leo Acosta into racial stereotypes. *Cannabis indica* became a profound anti-establishment symbol for the 1960s counterculture and for many other people since. Scholars have already proven what can be gained by studying *legal* commodities of nature, like corn, timber, or salmon. But studying *illegal* commodities like *Cannabis* shows how the American state and the American public used dominant ideas about race, class, gender, and non-compliant cultures—like beatniks, hippies, or today’s pot-smokers—to enforce their own vision of an appropriate relationship with nature. The history of *Cannabis* in the West also presents a remarkable and revealing chapter in a much larger story, the co-evolution of nature and culture.⁴³

When indentured Indians in the nineteenth century introduced a useful and pleasing herb to North America, it was used at first by the few people who understood its value. But the plant expanded its physical range by gradually crossing *cultural* as well as natural boundaries. Later, Americans in the West, under pressure from aggressive, single-minded laws and enforcement officials, found more efficient ways to select for the kinds of *Cannabis* they wanted, boosting the plant’s genetic diversity and again allowing for its proliferation across entirely new

⁴²Rendon, *Super Charged*, 149-50.

⁴³Russell, *Evolutionary History*, 85-102.

environments. By shedding light on the people who grew *C. indica*, I hope to tell a story of American *Cannabis* that sees past the traditional narrative of cops vs. hippies, right down to the plant in the ground. From the stories of people like Manuel Hernandez, Leo Acosta, Patrick Berti, and the hippies hidden out west of Garberville, a new, deeper perspective on Americans' use of *Cannabis indica* emerges. This understanding goes beyond the fear-mongering and profiteering of corrupt authorities, beyond the stale and false stigma of the stoned slacker, and touches something more profound: the idea that drug use among humans is not to be resented, feared, or attacked, but rather *understood* and appreciated as a basic, universal behavior, one that often produces profound and influential interactions with nature.

Paths into the Ground: History, *Cannabis indica*, and Drug Plants

Few, if any, scholars, even of *Cannabis*, have told these Americans' stories. This, then, is a history of *Cannabis* in the American West, but more specifically, it is first and foremost a history of *Cannabis indica*, the plant most commonly known as the drug marijuana. As important as *Cannabis sativa* is to the history of both *Cannabis* and humanity writ large, this is not a history of hemp. Others have written, and hopefully will keep writing, on *Cannabis sativa* and its relationships with Americans.⁴⁴ What I am trying to do here is tell a history that treats *Cannabis indica* as a plant that produces a drug, instead of a drug that comes from a plant. This is no minor distinction. Plenty has been written on the social history of marijuana users and on the drug's effects.⁴⁵ These are well-done and important works in their own right, and they have made my

⁴⁴ For discussion of *c. sativa* and *c. indica* in Britain and India, respectively, see James Mills, *Cannabis Britannica: Empire, Trade, and Prohibition 1800-1928* (New York: Oxford University Press, 2003); for a study of hemp as a commodity, see Alfred Crosby, *America, Russia, Hemp, and Napoleon: American Trade with Russia and the Baltic, 1783-1812* (Columbus: Ohio State University Press, 1965); for a general overview of hemp and its human history, see Clarke and Merlin, *Cannabis: Evolution and Ethnobotany*, 135-209.

⁴⁵ For social histories of *Cannabis indica* in North America, see Richard Bonnie and Charles Whitebread, *The Marijuana Conviction: A History of Marijuana Prohibition in the United States* (New York: The Lindesmith Center, 1999. Reprint, Charlottesville: University of Virginia Press, 1974); Martin Booth, *Cannabis: A History* (New York: St. Martin's Press, 2003); Isaac Campos, *Home Grown: Marijuana and the Origins of Mexico's War on Drugs*

work much easier. But rarely do such books analyze the unique botanical properties of *Cannabis indica* that allowed marijuana to flourish as a cheap, ubiquitous drug in the United States. With the exception of journalist Jim Rendon in *Super Charged*, many *Cannabis* writers do not bother to explore where all this marijuana that their subjects are smoking came from, how it was grown, or who was growing it. If they do, they tend to focus on growers in Northern California in the 1970s and '80s, leaving readers to wonder how marijuana was grown before then.⁴⁶ Given that *Cannabis* is the *only* illegal drug plant that grows in U.S. soil—coca and poppies certainly do not—this is a critical omission. Why, in modern *Cannabis* writing, has *C. indica*'s identity as a *plant* not been as salient as the cultural identity of the drug it produces? Work by environmental historians, geographers, and journalists has shown us that plants, even the ones that produce drugs, profoundly influence culture, and vice versa.⁴⁷ It is true that America's affinity for demonizing psychoactive substances and punishing those who use them has created an enticing social history that is rich in conflict and hypocrisy. Yet in the same way that marijuana is only the top parts of *Cannabis indica*, the drug is only one part of the plant's story, and the most visible one at that. But the rest of the plant, and thus the rest of its story, goes down into the soil, where people have planted and raised it for millennia.

We do not capture the depth of humans' relationship with *Cannabis indica* by following it into the jazz club, the medical lab, or the police station. We find it by following the plant back to the *ganja* fields of India, the gardens of Mexican emigrants, and the patches on hippie communes. It is there, in the ground and in the properties of *Cannabis indica* the *plant*, that we

(Chapel Hill: University of North Carolina Press, 2013); Lee, *Smoke Signals*; For scientific/medicinal studies, see Earlywine, *Understanding Marijuana*; Caulkins et al., *Marijuana Legalization*.

⁴⁶Lee, *Smoke Signals*, 176; Rendon, *Super Charged*.

⁴⁷Mark Fiege, *Republic of Nature: An Environmental History of the United States* (Seattle: University of Washington Press, 2012); Shawn William Miller, *An Environmental History of Latin America* (New York: Cambridge University Press, 2007); Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: W.W. Norton and Co., 1997); Pollan, *Botany of Desire*.

cut to the heart of this particular human-plant relationship: Humans have always sought, and will always seek out mind-altering substances in nature, and they have and will always cultivate and use *Cannabis indica* for that purpose, whether or not it is accepted by the laws and culture of their societies. *Cannabis indica* is a plant cultivated and bred, even sexually starved, for human pleasure.⁴⁸ Is it the only one, and are they all drug plants? We need to consider the staple crops of chocolate, cacao and sugar, as well as sweet or seedless fruit-bearing trees, as plants artificially selected and bred for human pleasure.⁴⁹ And like *Cannabis*, chocolate was condemned and demonized upon its introduction to a different part of the world.⁵⁰

When *C. indica* is treated only as marijuana, it is far too easy to lump it together—as the government and public have so often done throughout history—with other popular illegal drugs: cocaine, heroin, methamphetamines. It is true that marijuana was sometimes traded or used alongside these drugs. But track them all from their most organic form to their drug form, and striking differences emerge. Cocaine does not come directly from coca plants (family *Erythroxylaceae*), nor does heroin come straight from the opium poppy (*Papaversomniferum*); both drugs are obtained by applying industrial chemicals like acetic anhydride (heroin) and hydrochloric acid (cocaine) to the plants to isolate their psychoactive compounds.⁵¹ Ephedrine, a naturally occurring compound in plants of the genus *Ephedra*, is the base for modern cold tablets and methamphetamine; beginning with cold tablets, meth is “cooked” via a lengthy, incredibly

⁴⁸Pollan, *Botany of Desire*, 135-9.

⁴⁹Kate Loveman, “The Introduction of Chocolate into England: Retailers, Researchers, and Consumers, 1640-1730,” *Social History* 47 (Fall 2013); Ibid.: Pollan notes *Cannabis indica*, the apple tree (*Malusdomestica*), and the tulip (*Tulipa*) as plants cultivated for human pleasure; See also Andrew Sherrat, “Peculiar Substances,” Jordan Goodman, Paul E. Lovejoy, Andrew Sherrat (eds.), *Consuming Habits: Global and historical perspectives on how cultures define drugs* (New York: Routledge, 2007), 7.

⁵⁰The Catholic Church condemned the use of chocolate in Spain during the Inquisition; see Louis E. Grivetti and Howard-Yana Shapiro, *Chocolate: History, Culture, and Heritage* (Hoboken, NJ: John Wiley & Sons, 2009); as late as eighteenth-century England, chocolate was associated with promiscuous women; see Loveman, “Introduction of Chocolate to England,” 37.

⁵¹Mark Merlin, *On the Trail of the Ancient Opium Poppy* (Cranbury, NJ: Associated University Presses, 1984), 95; Joseph E. Spillane, *Cocaine: From Medical Marvel to Modern Menace, 1884-1920* (Baltimore: The Johns Hopkins University Press, 2000), 51.

dangerous process that involves the use of sulfuric and muriatic acids and the creation of phosphine and hydrogen chloride gases.⁵² Despite their high potential for abuse or misuse, doctors routinely prescribe safe dosages of poppy-derived painkillers like morphine, Percocet, and Oxycontin.⁵³ They can also prescribe the legal version of meth, Desoxyn, to treat Attention Deficit Disorder in children and adults.⁵⁴ Before its highly addictive and harmful qualities became apparent, cocaine was used as a local anesthetic in the U.S. from the late nineteenth through the early twentieth century.⁵⁵ Cocaine, heroin, methamphetamines—all of these are industrial drugs, and all of them are potent and physically addictive.⁵⁶ Although they have some important medical uses, excessive use of any one of them can kill or inflict great damage on the user.

To be sure, modern marijuana production can be considered an industrial process: *C. indica* is now often grown en masse indoors, in controlled environments, under high-powered, energy-sucking lamps. Fertilizers and even pesticides and fungicides may be applied.⁵⁷ And, as they have done with the opium poppy, coca plant, and *Ephedra* species, humans have biologically altered *C. indica* through artificial selection and breeding.

But that is where the similarities end. Unlike coke, heroin, or meth, marijuana is the only illicit drug in the United States that can be produced with only seeds, sunlight, water, soil, and a person. In Colorado, for example, people over the age of 21 are allowed to possess up to three

⁵² Lynn Riemer, “Methamphetamine Production—Lab Identification and the Dangers of Making Methamphetamine to Families, Children, and Professionals,” Herbert C. Covey (ed.), *The Methamphetamine Crisis: Strategies to Save Addicts, Families, and Communities* (Westport, CT: Praeger Publishers, 2007), 48-52.

⁵³ Susan Spencer, “Police feel impact of prescription drug addiction,” *Worcester Telegram & Gazette* (Mass.), May 2, 2014.

⁵⁴ Covey, *The Methamphetamine Crisis*, 3.

⁵⁵ Spillane, *Cocaine*, 14, 32-40.

⁵⁶ Sherrat, “Peculiar Substances,” 1-2.

⁵⁷ Rendon, *Super Charged*, 118-119.

flowering plants.⁵⁸ Adults can get seeds from the internet, dispensaries, or the black market and grow their own marijuana on a windowsill. There is no refinement process; the flowers are simply picked, trimmed, dried, and smoked as marijuana.⁵⁹ Aside from the addition of hybrid plants and indoor-growth technology, the production process has changed little over thousands of years: flower the plants, harvest the flowers, and then dry and imbibe. Indeed, it was not just the unique effects of marijuana, but also the relative ease of growing *Cannabis indica*, that contributed to the drug's rapid spread and popularity after it was introduced to the United States.⁶⁰

Also unlike coke, heroin, and meth, marijuana is non-toxic, and, although there is a slight risk of users developing psychological dependency, the drug is not physically addictive.⁶¹ As I've already noted, there are myriad medical uses for marijuana, and the federal government has quietly acknowledged this—but has never considered re-scheduling the drug. Herbal marijuana's medicinal value lies in its complex amalgam of compounds called cannabinoids that work together to produce medically beneficial effects. Additionally, the drug's effects are less intense when smoked than when ingested orally.⁶²

These facts suggest that assessing the medical value of marijuana requires a sophisticated understanding of *C. indica* beyond its principle psychoactive compounds. The U.S. government lacked such an understanding in the mid-1980s, when it funded the Solvay Pharmaceutical company's efforts to do with marijuana what Big Pharma does best—cram the beneficial

⁵⁸Colorado Constitution, Art. XVIII, Sec. 16, 3b.

⁵⁹Pollan, *Botany of Desire*, 137-8; Rendon, *Super Charged*, 204-6.

⁶⁰Zachary Falck is one author who understood this and recognized *Cannabis*' place among unwanted weeds; see Zachary J.S. Falck, *Weeds: An Environmental History of Metropolitan America* (Pittsburgh: University of Pittsburgh Press, 2010), 76-88.

⁶¹Earlywine, *Understanding Marijuana*, 32, 43-4.

⁶²Clarke and Merlin, *Evolution and Ethnobotany*, 253; Lee, *Smoke Signals*, 171.

properties of plants (and often, all their nasty side-effects) into a pill.⁶³ The result was Marinol, a heavy concentrate of marijuana's principle psychoactive cannabinoid, tetrahydrocannabinol (THC). Because they were orally ingesting pure THC without the balancing effects of the other cannabinoids, Marinol patients found themselves on one big trip that often induced panic attacks and failed to effectively treat the same conditions that smoked *Cannabis* treated.⁶⁴ Marinol, Big Pharma's expensive and simplistic answer to calls for legal access to medical *Cannabis*, got people higher than any available strain of marijuana, but it did not help them much. Thereafter, the pharmaceutical industry's sustained resistance to herbal marijuana, as well as the drug's Schedule I classification under the Controlled Substances Act, remained effective barriers to its recognition and legitimate deployment as a medicine.⁶⁵ Despite being much more dangerous and addictive than marijuana, cocaine, meth, and morphine are all classified as Schedule II drugs, or potentially abusive substances that have been approved for medicinal use. Put simply, the government believes that meth and morphine, two potentially lethal synthetic drugs, are safer and more medically valuable than marijuana, a non-lethal and natural substance.

We can draw three broad conclusions from these discussions and comparisons. First and most importantly, the drug marijuana is a fundamental part of the complex botany of the *C. indica* plant. It is therefore the only popular illicit drug in the U.S. that does not need to be processed with industrial chemicals before it is used. A second conclusion, based on the first, is that the plant's weedy qualities allowed it to spread quickly and easily over the American landscape. The third conclusion also builds on the first: unlike *Ephedra* or the opium poppy, *C. indica*'s complex botany defied the rigid reductionism of the pharmaceutical industry—its most

⁶³ The desire for all government-approved medical substances to be technologically reduced to their principle active ingredients reflects the modern state's desire for complex entities like plants to be "either transformed or reduced to a convenient, if partially fictional, shorthand"—a.k.a pills; see Scott, *Seeing Like a State*, 24.

⁶⁴ Lee, *Smoke Signals*, 168-71.

⁶⁵ *Ibid.*, 170.

useful medical form has been, and continues to be, its drug form. These are but a few examples of the important insights to be gained by considering *Cannabis indica* as a plant *first*, and a drug second. William Cronon called this approach “following the paths out of town”; I call it following a drug plant into the ground.⁶⁶

***Cannabis indica* and the American West**

At this point I need to clarify some of the goals and limits of this plant-first approach to *Cannabis* in the American West. First, Mexico was not the only source of *Cannabis indica* throughout U.S. history. Around the same time Mexicans brought their marijuana north of the Rio Grande, African-Americans and sailors brought *Cannabis indica* from the Caribbean to the U.S. via the port of New Orleans.⁶⁷ By the late nineteenth century, New Yorkers, too, had seen *Cannabis indica*; although this type, a broad-leaved variety brought from the mountainous regions of central Asia, was primarily used by Middle Easterners and other Asians not as marijuana but as hashish—small cakes of dried resin scraped from the plants as they flowered.⁶⁸

Additionally, because this is not primarily a social history, I do not attempt to analyze *every* group of Americans who were discriminated against for their association with marijuana. In the early twentieth century, Mexicans were neither the first nor the only people who Americans sought to keep down by linking them with drugs; African-Americans were first associated with cocaine, then marijuana, and now crack-cocaine.⁶⁹ The Chinese, the original “dope fiends” in the West, had long been associated with opium.⁷⁰ Women, especially white women, who smoked pot were said to be sexually unhinged by the drug, and rendered as addict-

⁶⁶ William Cronon, “Kennecott Journey: The Paths Out of Town,” William Cronon, George Miles, Jay Gitlin (eds.), *Under an Open Sky: Rethinking America’s Western Past* (New York: W.W. Norton & Co., 1992), 28-51.

⁶⁷ Bonnie and Whitebread, *Marijuana Conviction*, 41-44.

⁶⁸ Lee, *Smoke Signals*, 31-37; Martin Booth, *Cannabis: A History* (New York: St. Martin’s Press, 2003), 122-3; Clarke and Merlin, *Cannabis: Evolution and Ethnobotany*, 227.

⁶⁹ Bonnie and Whitebread, *Marijuana Conviction*, 30; Falck, *Weeds*, 80.

⁷⁰ Bonnie and Whitebread, *Marijuana Conviction*, 30.

sex slaves to male dealers.⁷¹ Mexicans also migrated to and grew marijuana in other parts of the country besides the West.

These facts should make clear that the history of *Cannabis indica* in the U.S. is not confined to that of Mexican-Americans, men, or the West. In the 1970s and 1980s, a uniquely American kind of marijuana *did* begin growing in the West. But before then, other scholars have shown, Americans in the East, South, and Midwest grew it in the same ways, in the same kinds of places, as Westerners did.⁷² Yet the West is home to an interesting historical paradox regarding *Cannabis*: among the first states to outlaw the plant were California (1915), Utah (1915), Colorado (1917), and Texas (1919), while as noted above, California, Colorado, and other Western states have spearheaded the modern marijuana legalization movement.

It is partly my aim to contextualize and help explain this paradox. For example, it makes sense that early cultivation of *Cannabis indica* was concentrated in southern California, as the region enjoys a warm, sunny climate year-round. Colorado's climate includes plenty of sunshine as well. In addition, both of those states, as well as others like Texas and Montana, had by the early twentieth century an impressive network of irrigation systems characteristic of agriculture in the arid West.⁷³ These irrigated fields invited, and were largely sustained by, many laborers from south of the border.

At first, the majority of marijuana users were male minorities. But as western Americans became more familiar with *Cannabis* and marijuana, they integrated the plant and drug into an illicit culture that gradually came to represent a significant chunk of the population, and cut across lines of class, gender, and race. By 2000, this continuous cultural integration was marked

⁷¹ Lee, *Smoke Signals*, 52;

⁷²Falck, *Weeds*, 83-4.

⁷³Mark Fiege, *Irrigated Eden* (Seattle: University of Washington Press, 1999);Rose Laflin, "Irrigation, Settlement, and Change on the Cache La Poudre River," Special report 15, Colorado Water Resources Research Institute (Colorado State University, 2005).

by the popular—if still controversial—passage of medical marijuana measures in seven Western states. A dozen years later, a majority of voters in Colorado and Washington, two states with strong *Cannabis* histories, fully embraced *Cannabis* culture by legalizing marijuana outright. Of course, marijuana is not legal or culturally accepted everywhere in the West, as indicated by Texas, Utah, and other states that do not seem to be on the verge of legalizing any use of the plant. But overall, though *Cannabis* is grown in every state, the American West today is the most *Cannabis*-friendly region in the nation, and possibly the world.

Like all cultivated crops, *Cannabis* consumed energy and labor everywhere it was grown, contributed to local and regional economies, and helped shape the identities and fates of millions of individuals. The prohibition of *Cannabis* has also devoured resources and labor, and is now an underlying cause of death and violence in Mexico and U.S. border communities.⁷⁴ These are strong enough reasons why historians and citizens should care about *Cannabis* and marijuana; its understudied past has much to tell us about the evolution of human-plant relationships, outlaw economies, and social justice in the United States. Its past can also be used to inform debates on drug policy in the present. While plenty has been written on the political and social history of marijuana, an environmental history of *Cannabis indica*, treating it as a plant first and a drug second, considerably deepens the story. With that in mind, the next section, a kind of second introduction, will formally introduce the biology and broader history of the plant—its evolution and discovery by humans, and its historical dispersal across the globe. And while I offer only a terse history of the plant in other places, it is my hope that other scholars take my plant-first approach to the history of *Cannabis indica* and apply it elsewhere—to other drugs, and to other parts of the nation and world.

⁷⁴Lee, *Smoke Signals*, 377; Campos, *Home Grown*, 230.

Cannabis

Evolution, Effects, Dispersal

In plants, humans have found nearly everything they need: food, fuel, shelter, fiber, medicine. With plants that can provide these in a reasonably efficient manner, such as maize, wheat, bamboo, cotton, or poppies, humans have formed ancient, reciprocal relationships—commonly referred to as “agriculture”—in humans select for desirable qualities which immobile plants defy the worst of their evolutionary handicaps.⁷⁵ By producing that which humanity likes best about them, these plants not only guarantee their species’ survival through cultivation, but they also defy their immobility, one of their worst evolutionary handicaps. Over time, they have rapidly increased and spread their populations via the activities of humans: defecation, locomotion, cultivation, and most recently, transportation. This gives them the edge over plants that possess nothing that humans need or desire. Drug plants derive all of these same benefits from humans, yet they provide us not with sustenance or shelter but with another extraordinary, if controversial benefit: pleasurable intoxication.

Cannabis indica is one of many plants that humans have found to offer this coveted shift in consciousness. It is best described as a wind-pollinated, flowering annual herb. Unlike most plant species, it is dioecious, meaning that plants are either male or female. The ancestor of all modern *Cannabis* varieties evolved between 135 and 110,000 years ago in the temperate latitudes of Central Asia. By the time humans migrated to that region, around 35,000 years ago, an earlier period of glacial activity had divided that ancestor into two species, pushed by the massive ice sheets into two different geographic refuges: *Cannabis sativa* in southeastern

⁷⁵ Diamond, *Guns, Germs, and Steel*, 104-156; Russell, *Evolutionary History*, 66-70.

Europe, and *Cannabis indica* in southeastern Asia.⁷⁶ The ethnobotanists Robert Clarke and Mark Merlin summarize *Cannabis*' earliest contacts with humans in this way:

“When early hunter-gatherer-fishers settled down along stream-scoured banks, they cleared some of the surrounding land and constructed shelters. In removing vegetation they helped create one of nature’s relatively rare environments—the ‘open habitat.’ ... Sun-loving *Cannabis* thrives in open environments with relatively well-drained soils rich in nitrogen compounds such as those found in and around dump heaps. Camp-following *Cannabis* was among the first plants to colonize newly opened habitats ... Humans provided *Cannabis* with a suitable habitat and soon learned to utilize plants growing on or near their waste piles rather than traveling to collect them. Different plant parts were used as sources of fiber, food, seed oil, medicine, and mind-altering drugs.”⁷⁷

From this description, early humans’ first experiences with *Cannabis* sound an awful lot like the discovery and domestication of other staple species, like corn or wheat: first, people alter the landscape in ways that disturb wild plant habitats, like clearing brush; this creates open spaces often colonized by seed plants. Then, humans decide what, if any, qualities of these plants they like, and artificially select for the plants that possess those qualities. They eventually decide to store seed and sow these “camp followers” in other human-disturbed sites.⁷⁸ That *Cannabis* is one of these camp followers is especially important for our purposes, because open, sunny, and *human* environments—in the form of vegetable gardens, cornfields, vacant city lots, forest clearings, or even basement grow rooms—are what *Cannabis* encountered in the twentieth-century American West.

Like other domesticated plants, *Cannabis* has developed clever ways to get around environmental problems. Because it has high transpiration rates, *Cannabis* can dry out quickly in arid environments like many parts of the West; this is where astute cultivators may have identified the region’s robust networks of rivers, streams, and irrigation ditches as appropriate

⁷⁶ Clarke and Merlin, *Cannabis: Evolution and Ethnobotany*, 24-5.

⁷⁷ *Ibid.*, 31.

⁷⁸ Bruce D. Smith, *The Emergence of Agriculture* (New York: Scientific American Library, 1995), 20-21.

growing sites. But the plant itself has an ace up its stem for this problem: when female plants begin flowering, they coat themselves with thousands of miniscule, crystalline glands called trichomes. These glands not only reflect sunlight, helping the plant lose less water, but they also secrete a sticky, fragrant resin that traps pollen from male plants.⁷⁹ In *Cannabis indica* varieties, this resin contains high amounts of Delta-9 tetrahydrocannabinol (THC), the mind-altering compound that gets humans high.⁸⁰

THC's original natural purpose is not definitively known; since other compounds called terpenoids ward off herbivorous predators, scientists have speculated that THC's purpose could also have been to attract humans or other animals.⁸¹ Early humans may have discovered the psychoactive properties of *Cannabis indica* when they accidentally inhaled smoke from burning plants, produced by either natural or human-set fires.⁸² Critically, uncultivated or abandoned stands of *Cannabis indica* gradually lose their potency as a drug, on account of subsequent natural selection for other, non-drug qualities.⁸³ This means that much of the wild or otherwise uncultivated *Cannabis* the U.S. government torched throughout the twentieth century was likely not drug material.

Raphael Mechoulam, an Israeli scientist, identified THC as the psychoactive chemical in marijuana in the mid-1960s.⁸⁴ Since then, researchers have identified some ten different compounds, collectively known as *cannabinoids*, that together are responsible for the range of psychoactive and physiological effects of drug *Cannabis*.⁸⁵ Among them is cannabidiol, or CBD, a major non-psychoactive cannabinoid. CBD is present in both hemp and drug *Cannabis*, acting

⁷⁹Ibid., 17; Rendon, *Super Charged*, 25.

⁸⁰Clarke and Merlin, *Cannabis: Evolution and Ethnobotany*, 51.

⁸¹Ibid., 51.

⁸²Ibid., 33.

⁸³Ibid., 51.

⁸⁴Pollan, *The Botany of Desire*, 152.

⁸⁵Clarke and Merlin, *Cannabis: Evolution and Ethnobotany*, 255.

as an anti-inflammatory, analgesic, antioxidant, and other beneficial agents; when combined with THC, CBD is an effective treatment for anxiety, multiple sclerosis, and psychosis.⁸⁶ In 1988, Allyn Howlett, a researcher at the University of St. Louis, discovered and began mapping a network of natural cannabinoid (CB) receptors in the human brain. When a person smokes marijuana, cannabinoids like THC and CBD bind to the CB receptors like keys to locks, unleashing the range of psychoactive and physiological effects. Scientists have found that these CB receptors are clustered in various parts of the brain, including the hippocampus, basal ganglia, and the amygdala; this explains some common effects of *Cannabis* use, such as temporary short-term memory impairment, mood elevation, or the somewhat static state often described as “couchlock.” The *lack* of CB receptors in the brain stem, the part of the brain that regulates breathing and circulation, may partially explain why no one has ever died of *Cannabis* use or an overdose.⁸⁷ In 1992, Mechoulam found the body’s own naturally produced “cannabinoid,” a compound he named anandamide. In the body, anandamide provides at lower magnitudes many of the same services that *Cannabis* does; for example, in women, it first helps naturally dull the pain of childbirth, and then helps them forget the incredible pain they felt, making it more likely they would want to reproduce again.⁸⁸

As noted, the discovery of this incredibly complicated system of locks and keys, known as the *endocannabinoid* system, is a recent phenomenon. It is safe to assume that Manuel Hernandez’s black-market customers in the 1940s, not to mention the police who pursued them, had no idea their own bodies featured ready-made receptors for the drug. But they nonetheless experienced the effects, which, in addition to those produced by the chemicals in the plant, also include those produced by two variables that play into everyone’s experience with *any* drug: set

⁸⁶ Ibid.

⁸⁷ Pollan, *The Botany of Desire*, 153.

⁸⁸ Ibid., 155.

and setting.⁸⁹ “Set” refers to the character and mood of a person during the time of drug use, and “setting” refers to the environment in which the drug was taken. For example, let’s say that buying some of Hernandez’s marijuana made one of his customers a bit nervous. Riding shotgun in a friend’s car, perhaps the customer smoked a joint to calm himself after the transaction. While settling anxiety is one of the known effects of *Cannabis*, this customer, having already been anxious about the illegality of his purchase, and knowing full well the consequences were the car to be stopped by the police, might experience a bout of paranoia under the influence. By contrast, a hippie in the homesteads west of Garberville in the early 1970s might have sat on his front porch, taken a long drag from a joint, and let the day’s stress melt away, knowing full well that he was beyond the reach of the law (although one can imagine his level of paranoia skyrocketing upon hearing the drone of an airplane). Many of the negative and positive psychological experiences marijuana users report can be explained in this manner. Put simply, there’s more to a drug experience than the drug itself; with marijuana, the nature of the *Cannabis* plant, a person’s natural disposition, the current mix of chemicals in his or her brain, as well as his or her environment, all matter.

But now we must exit the human brain and return to the plant, for it is still not clear how a dioecious herb that evolved 135,000 years ago in Central Asia made it to the western hemisphere. After the glaciers receded, humans helped *Cannabis sativa* expand from its refuge in southeastern Europe to occupy most of the temperate latitudes of Eurasia.⁹⁰ Archaeological evidence suggests that hemp was cultivated in China at least 6,000 years ago. Ancient peoples would have found *sativa* incredibly useful; its fibers were made into clothing or cordage, its seeds provided oil and food, its leaves provided mulch, and its female flowers, non-psychoactive

⁸⁹Ibid., 151.

⁹⁰ Clarke and Merlin, *Cannabis: Evolution and Ethnobotany*, 25.

but containing plenty of CBD, were used as medicine. By 1492, Europeans had been trading heavily in hemp for centuries. Its strong fibers made it most valuable in the production of cordage and sails for Europe's most powerful navies. Spanish ships—sporting hemp rope, if not sails—took *sativa* seeds across the Atlantic to Mexico in the 1530s.⁹¹ In 1545, the Spanish Crown mandated the cultivation of hemp, but it apparently did not organize a consistent supply of seeds for New Spain. Thus, large-scale hemp cultivation in Mexico did not begin until the late eighteenth century.⁹² Indigenous Mexicans learned about the plant by working with it in Spanish fields, and experimented with it in their own gardens.⁹³ Like the ancient Chinese, they discovered the plant's various benefits and helped it colonize a new part of the globe. By the nineteenth century, indigenous medicine women with encyclopedic plant knowledge, called *herbolarias*, collected wild *Cannabis* and sold it at markets.⁹⁴ The Spanish also cultivated hemp in Chile and southern California, ensuring that *Cannabis sativa* would be a mainstay in the New World landscape.⁹⁵

Cannabis indica took a different route to the Americas. Cultivated in the piedmont of the Himalayas and the Hindu Kush mountains, broad-leaved, mountain-acclimatized varieties produced large quantities of resin rich in THC. From this mountain-dwelling ancestor, ancient Indians gradually selected for a narrow-leaved, sun-loving variety that could be cultivated in the tropics of the Indian subcontinent.⁹⁶ The Indians called marijuana *ganja*, and smoked it out of water pipes or drank it in a tea called *bhang*.⁹⁷ By the time the British arrived, Indians had

⁹¹ Campos, *Home Grown*, 52.

⁹² *Ibid.*, 52-6.

⁹³ *Ibid.*, 53.

⁹⁴ *Ibid.*, 94.

⁹⁵ Clarke and Merlin, *Cannabis: Evolution and Ethnobotany*, 181.

⁹⁶ *Ibid.*, 55, 221.

⁹⁷ Mills, *Cannabis Britannica*, 48-9, 65.

recognized that unpollinated female plants produced the best *ganja*, and they figured out how to grow copious amounts of it by interfering in the natural reproductive cycle of *Cannabis*.

In the wild, this cycle begins when female plants sense the seasonal shortening of daylight hours. They cease vegetative growth and begin to produce flowers, coating them with sticky, pollen-trapping resin. When male plants mature, they produce pollen sacs that gradually open and release tiny clouds of pollen, letting the wind carry it to the females' sticky buds. But pollination depends on the fickle force of wind and is not guaranteed; to hedge their bets, female plants produce stacks of flowers that extend upward to catch whatever pollen may be breezing by. With each new flower comes more resin. Once pollinated, female plants cease producing flowers (and the all-important resin) and focus their energies on seed production. The seeds then fall to the ground, are dispersed by wind, animals, or people, and begin the cycle again.⁹⁸

Recognizing that unpollinated plants produced more and better *ganja*, Indian growers sought to keep female plants from being pollinated. At first, this task must have proved extraordinarily difficult, if not impossible; for until they mature and sprout pollen sacs or flowers, male and female *Cannabis* plants look nearly identical. Moreover, if just *one* male plant produced pollen in a field full of female *ganja* plants, it had the capacity to fertilize the entire crop. Eventually, every *ganja* field in India worth anything required the services of a *poddar*, or “ganja-doctor,” who would walk through the fields and mark male plants for removal.⁹⁹ Several months later, growers harvested the burgeoning, seedless female flowers, dried them, and sold them, using the revenue to pay rent on their land and for seasonal festivals like weddings.¹⁰⁰

⁹⁸ Clarke and Merlin, *Cannabis: Evolution and Ethnobotany*, 43-46.

⁹⁹ Mills, *Cannabis Britannica*, 54.

¹⁰⁰ *Ibid.*, 55-6.

Later, when growers in Mexico and the American West learned this process of growing seedless marijuana, they called the final product “*sinsemilla*”—Spanish for “without seeds.”¹⁰¹

From India, *Cannabis indica* followed the monsoon winds with traders to Africa and Arabia. It made it to Angola by the early 1800s and was introduced to the New World around 1810 via the slave trade between Angola and Brazil.¹⁰² In 1834, Britain outlawed slavery in its colonies. Not long after, a host of indentured Indian laborers arrived in the Caribbean, some carrying *ganja* seeds and the traditional knowledge to cultivate them.¹⁰³ These laborers soon migrated to different islands or to the American mainland, taking their plants and knowledge with them. As they had done with hemp hundreds of years before, Central Americans and other New World populations came to know and cultivate the plant themselves, spreading it north into Mexico. Then, in the chaotic aftermath of the downfall of Mexican dictator Porfirio Diaz in 1911, thousands of migrating Mexicans took *Cannabis indica*—marijuana—across the Rio Grande and into the American West.

¹⁰¹Pollan, *The Botany of Desire*, 122; Booth, *Cannabis*, 9-10.

¹⁰²Clarke and Merlin, *Evolution and Ethnobotany*, 123.

¹⁰³ Clarke and Merlin, *Cannabis: Evolution and Ethnobotany*, 130, 300.

Part I

“A Dangerous Mexican Weed”:

***Cannabis* and Marijuana in the West, 1846-1958**

While Edwin Bryant’s knowledge of *Cannabis* may have been limited, it is safe to assume that by 1846, he was quite familiar with the plant. The former journalist had spent more than a decade printing news in Kentucky, where hemp was described as “the grand staple” as early as 1810.¹⁰⁴ Now he wanted to write a book about California. To get his own ideas about the new territory, he headed west, leaving behind verdant Kentucky—but not *Cannabis*. Indeed, the plant’s fibers were stretched over many of the wooden wagon frames that made up westward expeditions like Bryant’s.¹⁰⁵ His destination, California, had also been the site of myriad hemp-farming experiments by the Spanish in the late eighteenth century; some *Cannabis* doubtlessly remained there.¹⁰⁶ By late summer, after a perilous trek across the Utah desert and the formidable Sierra Nevada mountains, Bryant had reached Sutter’s Fort near present-day Sacramento. Captain John Sutter, the Swiss emigrant who had seven years earlier secured a massive land grant in the Sacramento Valley, established his fort and adjacent farms near the meeting of the Sacramento and American rivers. In just two years, Sutter’s name would be inextricably linked to the tremendously valuable metal discovered on his land; but when Bryant arrived in September 1846, he noticed that Sutter was experimenting with another of nature’s gifts:

¹⁰⁴ Joshua Paddison (ed.), *A World Transformed: Firsthand Accounts of California Before the Gold Rush* (Berkeley: Heyday Books, 1999), 263-9; Ernest L. Abel, “‘That Valuable Article’: Hemp,” *American History Illustrated* 11 (1976), 31.

¹⁰⁵ Abel, “‘That Valuable Article,’” 31.

¹⁰⁶ Stanford A. Mosk, “Subsidized Hemp Production in Spanish California,” *Agricultural History* 13 (Oct. 1939), 171-175.

“I saw near the fort a small patch of hemp, which had been sown as an experiment, in the spring, and had not been irrigated. I never saw a ranker growth of hemp in Kentucky.”¹⁰⁷

Bryant was only one American during this period, traveling on a typical career arc—from writer to settler, to soldier, then back to writer. He is remembered mostly for crossing paths with Sutter, the Donner Party, and others in the pantheon of Western American lore. But his various associations with hemp—from writing about it in Kentucky, to traveling alongside hemp-covered wagons on the road west, to observing Sutter’s struggling stand in California—illustrate how important *Cannabis* was to Americans before they ever knew about marijuana. Yet later, a century of stereotyping, myth-making, and propaganda surrounding marijuana would effectively write both drug and non-drug *Cannabis* out of American history. As Bryant’s story shows, one does not need to look very hard or far to find examples of how the plant figured into the lives of many past Americans.

Nonetheless, with the Gold Rush and the decline of the hemp industry, Americans gradually forgot about *Cannabis*.¹⁰⁸ Importantly, in the decades to come they did learn a great deal about drugs. The horrific Civil War created thousands of morphine addicts, and opium accompanied the Chinese laborers who built the railroads.¹⁰⁹ In the 1850s, European scientists isolated cocaine, a strong, addictive stimulant, from the coca leaf; the drug was embraced in the U.S. first as a medicine, but by the 1890s black laborers on the lower Mississippi used the drug recreationally and as a work aid.¹¹⁰ White employers, seeing cocaine as a way to boost

¹⁰⁷Paddison, *A World Transformed*, 269.

¹⁰⁸ Bonnie and Whitebread, *Marijuana Conviction*, 3.

¹⁰⁹*Ibid.*, 8-9, 13-15.

¹¹⁰ Spillane, *Cocaine*, 91-2.

production, often supplied it to groups of black workers.¹¹¹ And by the latter half of the nineteenth century, marijuana was readily available in the Caribbean, New Orleans, and other major cities on the Mississippi such as Memphis.¹¹² *Cannabis indica* reached these areas only after 1834, when the British abolished the slave trade in the colonies. Thereafter, African slaves on Caribbean plantations were replaced with indentured Indian laborers—the bringers of *ganja* seeds.¹¹³

The plants the Indians brought were a tropically adapted version of *Cannabis indica*. Its ancestors developed in the Himalayas, and through centuries of selective cultivation and regional trade, Indians brought it down from the mountains and into India's tropical latitudes.¹¹⁴ Like the *sativa* grown in the Americas for hemp, this variety of *Cannabis* grew tall stems with narrow leaves. But it differed from *sativa* in one huge way: *indica*'s flowers produced psychoactive resin so that when dried and smoked as *ganja*, or drunk in a tea called *bhang*, they produced the mellow, mood-shifting high Indians had coveted since ancient times.¹¹⁵

Battling oppressive British laws on Caribbean plantations, many indentured Indians migrated throughout the islands and the coastal areas of South and Central America.¹¹⁶ At some point, these immigrants brought *indica* plants to the mainland, and it is likely—though as yet undocumented—that over the ensuing century they interbred with and acquired traits of the extant *sativa* varieties.¹¹⁷ Unsurprisingly, it was by *human* means that the two major subspecies

¹¹¹Ibid.; William Barlow, “Looking Up at Down”: *The Emergence of Blues Culture* (Philadelphia: Temple University Press, 1989), 207; Courtwright, “Cocaine in the U.S.,” Goodman et al., *Consuming Habits*, 220.

¹¹²Ibid.; In Memphis, Barlow notes that “Moonshine liquor and marijuana were sold in the saloons and on the street corners up and down Beale St.”

¹¹³Clarke and Merlin, *Evolution and Ethnobotany*, 130.

¹¹⁴Ibid., 221.

¹¹⁵Ibid., 228-30.

¹¹⁶Lommarsh Roopnarine, “Indian migration during indentured servitude in British Guiana and Trinidad, 1850-1920,” *Labor History* 52 (May 2011), 185; Vera Rubin and Lambros Comitas, *Ganja in Jamaica: A Medical Anthropological Study of Chronic Marijuana Use* (The Hague: New Babylon Studies in the Social Sciences, 1975).

¹¹⁷Clarke and Merlin, *Evolution and Ethnobotany*, 130.

of *Cannabis*, having diverged thousands of years ago on northerly and southerly tracts from Central Asia, were reunited in Central and North America by the mid-nineteenth century.¹¹⁸

In the American tropics, especially the coastal lowlands, the newly arrived *indica* would have encountered a sunny, moist environment, much like its Indian homeland. There were tropical downpours that mirrored monsoons, and plenty of man-made clearings to colonize. Most importantly, there were indigenous people and creoles who were quite adept at identifying and incorporating new, useful plants into their culture. By 1842, *indica* had apparently spread to southern and central Mexico.¹¹⁹

La Mota Mexicana

Mexico was no stranger to drug plants. It is estimated that more than half of the world's 180 known hallucinogenic plants are used in Mexico.¹²⁰ Tobacco was among the gods' many herbal gifts to the ancient Mayans, and for thirty years before independence, the addictive crop accounted for as much as 22 percent of the colonial state's revenue.¹²¹ It was also in Mexico City that the first tobacco cigarette was rolled; it should be no surprise that when marijuana arrived, the cigarette was Mexicans' preferred medium for imbibing. *Herbolarias*, indigenous medicine women, collected wild *Cannabis*—likely both *sativa* and *indica*, as both had medicinal qualities—and sold it at Mexican markets. From there it was brought primarily to prisons soldiers' barracks.¹²² Marijuana's prevalent use in the Mexican armies of the late nineteenth and early twentieth century foreshadowed the drug's adoption by the American army in Vietnam

¹¹⁸Ibid., 25.

¹¹⁹ Campos, *Home Grown*, 73.

¹²⁰Ibid., 43-44.

¹²¹ Eric Burns, *The Smoke of the Gods: A Social History of Tobacco* (Philadelphia: Temple University Press, 2007), 3; Campos, *Home Grown*, 52.

¹²²Ibid., 85, 94, 149-50.

during the 1960s; in both cases, military conflicts facilitated the introduction of *Cannabis indica* varieties to the U.S.

When the dictator Porfirio Diaz took over the government in 1877, he was set on modernizing the Mexican economy by heavily investing in agricultural production. In 1885, his government began the long process of draining Mexico City's lakes to create more farmland.¹²³ Supported by hygienist technocrats who believed the lakes were the sources of terrible diseases such as cholera, the Diaz government was apparently committed to "cleaning up" the Valley of Mexico. It did not give similar attention to its army barracks or prisons. Like other Mexican leaders, Diaz impressed Mexico's most marginalized people, including "workers, drunks, and criminals" from the cities, as well as peasants from the countryside, into military service.¹²⁴ Barracks were poorly ventilated and overcrowded places where disease preyed on soldiers, who were also not paid very much. Mexican critics like Alfonso Luis Velasco in 1889 noted that "the soldier on campaign lacks everything," and that "marijuana and prostitutes" were "the only consolation for soldiers impressed into the army."¹²⁵

Mexican prisons during the Porfiriato, as they had been throughout the nineteenth century, were also overcrowded, filthy, and disease-ridden. Unnecessarily slow court proceedings left innocent people in prison as long as months or even years, and violent fights and drug use were common.¹²⁶ Smuggling or allowing marijuana and alcohol into the prisons cost many guards their jobs, and selling drugs to inmates sometimes proved a lucrative venture for

¹²³ Alejandro Tortolero Villasenor, "Transforming the Central Mexican Waterscape: Lake Drainage and its Consequences during the Porfiriato (1877-1911)," in Christian Brannstrom (ed.), *Territories, Commodities, Knowledges: Latin American Environmental Histories in the Nineteenth and Twentieth Centuries* (London: Institute for the Study of the Americas, 2004), 121-5.

¹²⁴ Campos, *Home Grown*, 135.

¹²⁵ *Ibid.*

¹²⁶ *Ibid.*, 133-4.

guards and other prison employees.¹²⁷ The lake-draining and agricultural programs of the Porfiriato robbed many poorer Mexicans of their subsistence patterns and land, increasing the ranks of the destitute and desperate.¹²⁸ Many of these people found paltry employment on the large *hacienda* estates; undoubtedly, many of them also wound up in the army as conscripts or in prison.¹²⁹ On account of its widespread use by soldiers, criminals, and the rest of the lowly classes, *Cannabis* developed an unsavory reputation as a mentally and socially destructive substance.

Upper-class Mexicans in the Porfiriato tended to see the typical marijuana smoker's social status, filthy environment, and drug use as a product of flawed peasant genes instead of neglectful government policy. To the elites, marijuana smoking was part of a degenerative plague of substance abuse that threatened Mexico's ascent to the pantheon of "great" western nations.¹³⁰ In the 1890s, physician Maximo Silva wrote that marijuana enhanced all the terrible qualities of the lowly people who used it: "Imagine, as in a hellish vision, a diabolic mob, whores, ruffians and murderers with their personalities multiplied and compelled to act thanks to the drug."¹³¹ Opinions like Silva's were typical of Mexican elites, who published European-style critiques of their country's racial stock and sensational newspaper reports of marijuana-instigated crimes.¹³² But for conscripted soldiers, displaced farmers, or diseased convicts, the drug offered a cheap—if terribly brief—respite from the crushing realities of being at the bottom of the social ladder. That so many Mexicans had taken to the herb by the early 1900s meant that the strongly centralized Diaz regime, a government that drained large, ancient lakes and revived the entire

¹²⁷Ibid., 136.

¹²⁸Villasenor, "Transforming the Central Mexican Waterscape," 144.

¹²⁹Ibid.

¹³⁰Campos, *Home Grown*, 128-31.

¹³¹Ibid., 118.

¹³²Ibid., 120, 127-8.

national economy, was ultimately powerless to stop the use and spread of a popular intoxicating herb.

Medicine, Folklore, and American Angst

Before Mexicans introduced marijuana on a large scale and the drug became the racialized, cultural bogeyman of America, *Cannabis indica* was considered a legitimate part of the U.S. pharmacopeia.¹³³ By the late nineteenth century it was included in various home remedies and sold in solvents or tinctures at drug stores. In 1898, Dr. F.H. Cassells of the Washington Medical Veterinary Association included *Cannabis indica* as part of his remedy for acute indigestion in horses.¹³⁴ The same year, *The San Francisco Call* named “Indian *Cannabis*,” along with opium and chloral, as a sleep aid.¹³⁵ In 1901, a section of Lincoln, Nebraska’s *The Commoner* prescribed a mixture of *C. indica*, salicylic acid, and collodion as a cure for corns.¹³⁶ Similar remedies appeared in *The San Francisco Call* in 1901, *The Morning Oregonian* in 1907, and *The Spokane Press* in 1910.¹³⁷ As late as 1917, after Colorado, Utah, and Texas already outlawed the plant, the U.S. pharmacopoeia considered *C. indica* tinctures appropriate medical products.¹³⁸

Cannabis indica retained its remedial and relatively low-key status in the U.S. throughout the early 1900s. By this time a small number of Mexicans were bringing it across the border into Texas and New Mexico, as Richard Bonnie and Charles Whitebread note:

¹³³ Bonnie and Whitebread, *Marijuana Conviction*, 4.

¹³⁴ “Indigestion Acute or Gastric Tympanitis (Address by Dr. F.H. Cassells at the recent meeting of the Washington Medical Veterinary Association),” *Ranch and Range* (North Yakima, Washington), July 30, 1898, 6-7.

¹³⁵ “If You Cannot Sleep at Night Read This,” *The San Francisco Call*, January 16, 1898.

¹³⁶ Helen Watts McVey, “The Home Department: Good Things to Know,” *The Commoner*, volume 11, issue 48 (1901), 8.

¹³⁷ “Pages from Harriet Hubbard Ayer’s Book Health and Beauty,” *The San Francisco Call*, February 17, 1901; “Little Cures for Our Aches and Pains,” *The Morning Oregonian*, March 24, 1907; Mme. Lina Cavalieri, “My Secrets of Beauty—Care of the Feet,” *The Spokane Press*, January 9, 1910.

¹³⁸ Advertisement, The Corby Compressed Yeast Company, *The Washington Times*, January 5, 1917.

“In Mexican districts of the border towns and in major cities these immigrants continued to smoke and grow marijuana as they had done at home ... and a steady supply of marijuana easily crossed the border into Laredo, El Paso, San Antonio, Nogales, and other border towns and major cities.”¹³⁹

Mexican marijuana folklore was already following these immigrants across the border.

Syndicated newspaper reports from Mexico City warned Americans of a “Dangerous Mexican Weed to Smoke” in 1904.¹⁴⁰ In 1909, officers in an Arizona prison searched for “Indian hemp of *Cannabis Indica* which is much in favor with Mexican prisoners who call it ‘miriwana.’”¹⁴¹

This slow trickle of *Cannabis*-toting immigrants, most of whom remained in the border states, would become a torrent after 1911, when Mexican revolutionaries overthrew the Porfiriato and began the decade-long Mexican Revolution. Indeed, between 1915 and 1930 some 590,000 Mexicans entered the United States, many of them landless peasants displaced by Porfiriato policy or fleeing the chaos of the revolution.¹⁴² Following Mexicans everywhere they immigrated were racially driven statutes that in some way outlawed *Cannabis indica*. California and Utah were the first to ban nonmedical *Cannabis* distribution in 1915. Colorado and Texas followed in 1917 and 1919. Nevada, New Mexico, Oregon, and Washington passed laws in 1923. By 1931, the rest of the West—Idaho, Montana, Wyoming, and Arizona—had outlawed marijuana distribution.¹⁴³

Why outlaw the plant, and not the immigrants? It’s a fair question, considering that the same anxious white middle class that considered Mexicans a “primitive” people pushed for restrictions on many other immigrant groups during this period.¹⁴⁴ Between 1917 and 1924,

¹³⁹ Bonnie and Whitebread, *Marijuana Conviction*, 33.

¹⁴⁰ “Dangerous Mexican Weed to Smoke,” *Daily Journal* (Telluride, Colo.), August 8, 1904.

¹⁴¹ “Had the Way Paved for Descent to Freedom,” *The Arizona Republican*, June 17, 1909.

¹⁴² David Gutierrez, *Walls and Mirrors: Mexican Americans, Mexican Immigrants, and the Politics of Ethnicity* (Berkeley: University of California Press, 1995), 39; Bonnie and Whitebread, *Marijuana Conviction*, 38.

¹⁴³ *Ibid.*, 52.

¹⁴⁴ Henry O. Whiteside, *Menace in the West: Colorado and the American Experience with Drugs, 1873-1963* (Colorado Historical Society, 1997), 52-3.

three separate immigration restriction bills, designed to safeguard the nation's "racial purity," made it through Congress.¹⁴⁵ All of them condoned immigration from northern Europe, Scandinavia, and Latin America, while severely restricting immigration from eastern and southern Europe and Japan. The exclusion of these latter groups was justified on account of their racial and cultural "inferiority" to older immigrant groups.¹⁴⁶

Clearly, white Americans at the time also believed themselves racially superior to Mexicans and other Latin Americans, so why allow them in? Given the racial and religious tensions of the time, wouldn't Mexicans, with their dark skin and Catholicism, pose just as big of a threat to white Protestant culture as the Poles or Italians? The answer is they certainly would have, if white-owned agriculture in the West hadn't been completely dependent on their cheap labor.¹⁴⁷

Since 1890, the amount of irrigated farmland in the West had been increasing dramatically; by 1909 the Southwest had some 14 million acres of irrigated farms, and by 1920 California alone had four million acres.¹⁴⁸ These farms needed affordable labor, and Chinese and Japanese laborers had already been ruled out by the Chinese Exclusion Act of 1882 and subsequent immigration restrictions.¹⁴⁹ Then, increasing restrictions on European immigration from 1917 through 1924 diminished the German Russian labor force on beet fields in Idaho, Washington, Nevada, Wyoming, and Colorado, and the sugar beet industry, along with many other agricultural operations in the West, became dependent on Mexican labor.¹⁵⁰ Fortunately for American agriculture and for Mexicans fleeing turmoil in their homeland, even white middle

¹⁴⁵ Michael E. Parrish, *Anxious Decades: America in Prosperity and Depression, 1920-1941* (New York: W.W. Norton & Co., 1992), 110-11.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid., 113.

¹⁴⁸ Gutierrez, *Walls and Mirrors*, 41.

¹⁴⁹ Ibid., 44.

¹⁵⁰ Ibid.; Fiege, *Irrigated Eden*, 136-7; Gutierrez, *Walls and Mirrors*, 45; Sierra Standish, *Beet Borderland* (Master's Thesis: Colorado State University, 2002), 30, 36-7.

class prejudice, at the height of its power at the turn of the twentieth century, bowed before the needs of the market. Rather than turn away a willing, cheap labor force, whites settled for restricting Mexicans to low-paying manual labor and outlawing the use of “degenerative” elements of their culture, like *Cannabis indica*.

Workers’ Weed

When they arrived in the U.S., many Mexicans found work in Western railroad yards, mines, or agricultural fields.¹⁵¹ Many entered into contracts brokered south of the border by American labor agencies.¹⁵² Families migrating to beet fields in Colorado typically signed contracts with growers that specified not only where they would work, but also where they would live and whether they could tend their own gardens and livestock.¹⁵³ The lives of most Mexican immigrants and their families in the early twentieth century revolved around manual work, but like other groups of marginalized and oppressed workers in American history, most did all they could to squeeze a living out of the landscapes of labor.¹⁵⁴

To help their minds and bodies recover from grueling agricultural labor or to supplement their meager incomes, many Mexican immigrants grew marijuana on leased or private land, in their gardens, or in the irrigated landscapes of the West.¹⁵⁵ They were not the first group of laborers to use *Cannabis*. In the early to mid-1800s, indentured Indian workers on Caribbean

¹⁵¹ Gutierrez, *Walls and Mirrors*, 45; Katherine Benton-Cohen, *Borderline Americans: Racial Division and Labor War in the Arizona Borderlands* (Cambridge: Harvard University Press, 2009), 90.

¹⁵² Gutierrez, *Walls and Mirrors*, 44.

¹⁵³ Standish, *Beet Borderland*, 26-7.

¹⁵⁴ For a similar description of exploited laborers manipulating the worked environment for personal gain, see Mart Stewart, “Rice, Water, and Power: Landscapes of Domination and Resistance in the Lowcountry, 1790-1880,” *Environmental History Review* 15 (Autumn 1991), pp. 47-64.

¹⁵⁵ In 1899 the British pharmacologist Walter E. Dixon wrote that the results of smoking *Cannabis* “are marvelous in giving staying power and altering the feelings of muscular fatigue which follow hard physical labour”; see Clarke and Merlin, *Ethnobotany and Evolution*, 251; For a description of how irrigated agriculture developed in the West, see Fiege, *Irrigated Eden*, 17-28.

plantations used *C. indica* for alleviating fatigue and “creating energy.”¹⁵⁶ Similarly, Mereciano Vigil, a Mexican beet farmer in Las Animas, Colorado, told police upon his arrest in 1937 that smoking marijuana “kept him from getting tired in the field.”¹⁵⁷ While *C. indica* is not a stimulant, it can be reasonably deduced that under the euphoric effects of marijuana, a laborer like Vigil might find work more pleasant, and therefore be more likely to keep at it longer.

Vigil’s open explanation of why he smoked marijuana turned out to be rare, but Mexican American cultivation of *C. indica* in the early twentieth century was not. In 1919, after Arizona and California outlawed growth of the plant, an immigrant identified as “M. Cochon” grew *C. indica* at his home in Los Angeles, which he then sold to fellow Mexicans in Prescott, Arizona.¹⁵⁸ Two years later, deputies in San Bernardino, California removed “[a]n entire wagon load” of weed from a farm tended by unnamed “Mexicans.”¹⁵⁹ In Sidney, Montana in 1926, “some of the Mexican colony”—beet workers—were thought to be drunk on illegal liquor.¹⁶⁰ But when investigating officers probed workers’ gardens, they discovered *C. indica*—“a weed which thrives under cultivation”—growing amidst chili peppers.¹⁶¹ In 1931 marijuana was again found growing in the Yellowstone River Valley, this time in irrigation ditches and “in small plantings over a widely scattered area” near Forsyth, Montana.¹⁶² When it wasn’t ripped up by police, the marijuana crop often made it into working-class establishments like pool halls, which became preferred sites for marijuana deals.¹⁶³

¹⁵⁶ Michael V. Angrosino, “Rum and Ganja: Indenture, Drug Foods, Labor Motivation, and the Evolution of the Modern Sugar Industry in Trinidad,” William Jankowiak and Daniel Bradburd, *Drugs, Labor, and Colonial Expansion* (Tucson: University of Arizona Press, 2003), 105.

¹⁵⁷ “Marijuana is Found on Mexican Worker,” *Las Animas Leader*, October 13, 1937.

¹⁵⁸ “Fighting Weed Vendor Gets Stiff Jolt,” *Weekly Journal-Miner*, April 16, 1919.

¹⁵⁹ “Marijuana Confiscated by County Sheriff,” *Corona Courier*, August 26, 1921.

¹⁶⁰ “Jags at Sidney Laid on Weeds,” *Billings Gazette*, September 25, 1926.

¹⁶¹ *Ibid.*

¹⁶² “Rosebud Authorities Discover Marijuana,” *Billings Gazette*, September 25, 1931.

¹⁶³ “Drug Peddler Found Guilty,” *Salt Lake Tribune*, March 27, 1926.

By chance, marijuana was entering the West on a large scale during alcohol prohibition, and some Mexican bootleggers also grew *C. indica*. In 1923, Tom Medideno, Porfirio Casas and his wife, and Ercuiano Jiminez were arrested in Wasco, California after officers discovered their liquor still and an adjacent grove of tall *C. indica*.¹⁶⁴ In 1928 in Salt Lake City, officers took a cask of wine, some whiskey, weapons, and fifteen large cans of marijuana from John Parren and Ventolo Lopez.¹⁶⁵ Later that year, federal prohibition officers raided a small moonshine operation run by two Mexican beet field workers in Billings, Montana; the workers had apparently found a new enterprise now that their seasonal employment in the fields had finished. In addition to fifteen and half pints of booze, officers confiscated a box of marijuana.¹⁶⁶ Some outlaws, like Valdo Santos, saw a better opportunity in the marijuana trade. Santos, who was arrested with five pounds of marijuana in New Orleans in 1924, opined that the marijuana business “beats bootlegging because the fines are smaller and I sell it for thirty-five cents a cigarette.”¹⁶⁷ Probably because it offered a cheap replacement, Montana’s *Billings Gazette* referred to marijuana as the “New ‘Booze.’”¹⁶⁸ While some Mexicans and other bootleggers offered marijuana along with alcohol, it does not appear that the two illicit industries became further entangled. In the West, this was likely because marijuana was still a predominantly Mexican product, largely unknown to the powerful liquor mobs that dominated Los Angeles and other big cities during the 1920s.

¹⁶⁴ “Marijuana Grove Seized at Wasco,” *Bakersfield Californian*, November 8, 1923.

¹⁶⁵ “Whisky, Arms Taken in Raid,” *Salt Lake Tribune*, March 13, 1928.

¹⁶⁶ “Mexican Confesses Growing Marijuana,” *Helena Independent*, November 20, 1928.

¹⁶⁷ Associated Press, “Use of Loco Weed Growing Popular,” *Kalispell Daily Interlake*, April 2, 1924.

¹⁶⁸ “Have ‘New Booze,’” *Billings Gazette*, October 7, 1926.

Cause for Alarm

As the quick progression of state laws that outlawed *Cannabis* distribution suggests, middle-class, white America was taken aback by a new group of foreigners seen to be invading their country and planting it with “narcotic” drugs.¹⁶⁹ In 1925 *The Bakersfield Californian* warned that “a new dope traffic threatens to create a furor in America’s western states.”¹⁷⁰ The article’s classification of marijuana as a “strong narcotic” was typical; to American observers, the effects marijuana was said to have on the Mexicans were similar to those of opium on the Chinese. As the *Californian* article suggests, the two drugs were constantly compared throughout the 1920s, and marijuana was even said to “contain narcotic in greater proportions than opium in poppies.”¹⁷¹ But if marijuana, like opium, was capable of rendering someone aloof or delirious, it was also capable of sending the user into a murderous rampage, as the *San Antonio Light* reported in 1928:

“And the man under the influence of hasheesh catches up his knife and runs through the streets hacking and killing every one he meets. No, he has no special grievance against mankind. When he is himself, he is probably a good humored, harmless, well-meaning creature, but hasheesh is the murder drug, and it is the hasheesh which makes him pick up his knife and start out to kill. Marijuana is American hasheesh.”¹⁷²

Reports like these show the depth to which Mexican marijuana folklore had shaped American attitudes by the late twenties. The belief that marijuana fueled knife fights between lower-class Mexicans was at least forty years old in Mexico, and it was largely based on violent incidents primed by alcohol, not marijuana.¹⁷³ A typical example was a 1924 incident in

¹⁶⁹ The period between 1900 and 1930 was one of increasing and unprecedented anti-Mexican sentiment; see Benton-Cohen, *Borderline Americans*, 239-50.

¹⁷⁰ “Fear that Marijuana Will Start Another Dope Craze in U.S.,” *Bakersfield Californian*, November 3, 1925.

¹⁷¹ *Ibid.*; “Menace as Great as Opium Looms on Mex. Border,” *Daily Journal* (Telluride, Colo.), August 16, 1921; “Marihuana Evil is Growing in Colorado Says George Collins,” *Denver Post*, February 21, 1927.

¹⁷² Winifred Black, “Marijuana, ‘Flivver’ of Drug Family, Described by Miss Black: Humble Texas Weed Drives Men to Slay,” *San Antonio Light*, February 25, 1928.

¹⁷³ Campos, *Home Grown*, 113-14.

Winnemucca, Nevada: Juan Laya was “under the influence of marijuana” and “had been drinking heavily” when he showed up at Frank Gillardo’s cabin and lunged at Gillardo with a knife.

Gillardo managed to fend off his attacker with a hammer.¹⁷⁴ While “marijuana” was listed as the first offending drug, it is much more likely that Laya’s lunge was fueled by overindulgence in alcohol.

Additionally, the *Light*’s description of the marijuana user as a “well-meaning creature” when off the drug reflected the widespread belief among both Mexicans and Americans that drugs drove violent behavior among a sub-human lower class. Thus, in both countries, authorities saw it as their duty to prevent the ignorant, drug-susceptible lower classes from destroying one another and from corrupting broader society. The *Light* appealed to such fears when it noted how easy the weed was to grow, claiming “You can grow enough marijuana in a window box to drive the whole population of the United States stark, staring, raving mad.”¹⁷⁵ Yet neither these exaggerated warnings, nor the prohibitory laws they inspired in many states and municipalities, seemed to halt the *Cannabis* trade. By 1927 the *Denver Post* reported that marijuana was “gaining favor among Americans.”¹⁷⁶

While often exaggerated, middle-class Americans’ fears of foreigners inundating their society with drugs at this time were not altogether unfounded. After all, the example from Denver in 1922, where peddlers sold morphine and cocaine to girls at East Denver High, reflected a very real and thriving black market in drugs.¹⁷⁷ Some marijuana dealers also sold to high schoolers. In 1929, police in San Jose, New Mexico, raided the ranch home of a Mrs. Cruz de Cuco, seizing a “large quantity of marijuana and equipment ... for making the drug fit to

¹⁷⁴ “Freed of Murder But Jailed Again,” *Reno Evening Gazette*, November 13, 1924.

¹⁷⁵ Black, “Marijuana,” *San Antonio Light*, February 25, 1928.

¹⁷⁶ “Marihuana Evil is Growing”

¹⁷⁷ Albert W. Stone, “Dope Ring Perils School Girls to Create More Drug Addicts,” *Denver Post*, April 27, 1922.

use.”¹⁷⁸ The “aged woman” had been arrested for selling the drug once before, and she was now placed under bond for running an operation that sold it to students at John Marshal school.¹⁷⁹ By 1934 there was enough *C. indica* in Seattle—at least some of it grown in-state—to supply students at the University of Washington with marijuana cigarettes.¹⁸⁰

When marijuana began turning up around schools or in the hands of teenagers, Americans could not help but lump the herb together with other, more dangerous “narcotics.” While the non-medical traffic of drugs like opium, morphine, and cocaine was strictly outlawed by the 1914 Harrison Narcotics Act, the lack of similarly strong laws against *C. indica* at local, state, and federal levels was at this time the source of continuous anxiety for authorities. For example, Frank Rojas, operator of a pool hall in Salt Lake City, was found guilty of selling marijuana cigarettes to three teenagers in 1926; after Rojas’ case was thrown out by a district court judge, the local sheriff petitioned to make the sale of the “narcotic” a misdemeanor.¹⁸¹ In 1927, state rep Ray Talbot of Pueblo, Colorado, declared that immigrant-grown marijuana was being used by “20 to 40 per cent of the students in Pueblo high schools,” in both cigarettes and “liquid form.”¹⁸² Talbot used the school racket story to get support for a bill strengthening Colorado’s anti-*Cannabis* laws, which the legislature unanimously approved. Seven years later, when Harry Anslinger’s Federal Bureau of Narcotics was gathering support for federal *Cannabis* prohibition, reports of marijuana sold to schoolchildren in Raton led New Mexican authorities to contribute information to the Bureau’s national survey on marijuana use. State officers were on

¹⁷⁸ “Aged Woman, Accused of Sale of Marijuana to Students, Put Under Bond By Officers in Raid,” *Albuquerque Journal*, January 12, 1929.

¹⁷⁹ *Ibid.*

¹⁸⁰ Howard Scott, “Marijuana Sales On Washington U. Campus Told,” *Berkeley Daily Gazette*, March 2, 1934.

¹⁸¹ “Drug Peddler Found Guilty,” *Salt Lake Tribune*, March 27, 1926; “Sheriff Wants Ban of Law Placed on Sale of Marijuana,” *Salt Lake Tribune*, May 18, 1926.

¹⁸² “Smuggling of Mexican Drug into Pueblo Schools Charged,” *Denver Post*, February 18, 1927.

board with a federal law, complaining that the current law in New Mexico was “difficult” to enforce because it only outlawed “possession for sale,” and not simple possession.¹⁸³

In these reports, American authorities conflated the effects of marijuana with those of other drugs, mainly opium. Most of the other drugs available had a high rate of physical addiction; marijuana users may have kept coming back for more, but they were not “addicts” in the way the Colorado and New Mexican papers claimed. We can’t be totally sure what the *Post* meant by “liquid form,” but given the fact that morphine and heroin, two of the most commonly used intravenous drugs, were widely peddled during this time, it is likely that either Talbot or the paper assumed that marijuana could be injected just like any other “narcotic.” Of course, the nature of cannabinoids—they are fat-soluble, not water-soluble—meant that marijuana could not be used intravenously.¹⁸⁴

Evil in Any Environment

Imported folklore, prevailing knowledge and attitudes about drugs, and the sale of marijuana to schoolchildren certainly made middle-class America anxious about *C. indica*. But a closer look at the language used by police, lawmakers, and newspapers in many of these reports reveals that the seemingly apex concern of marijuana’s effects ultimately stemmed from the unique capabilities of the plant: *C. indica*, unlike the opium poppy or coca leaf, seemed to thrive *anywhere* Americans lived, meaning it threatened the public in a more direct way than did other drugs. Two years after Rojas’ arrest in Utah, detective E.A. Hedman, who oversaw the raid on John Parren and Ventolo Lopez, told the *Salt Lake Tribune* that the plant “grows prolifically in this climate.”¹⁸⁵ In Colorado, Talbot claimed that marijuana “is grown in large quantities by

¹⁸³ “Plot to Make Marijuana Addicts of Children Bared,” *Albuquerque Journal*, February 22, 1934.

¹⁸⁴ Lee, *Smoke Signals*, 54.

¹⁸⁵ “Whisky, Arms Taken in Raid,” *Salt Lake Tribune*, March 13, 1928.

Mexicans in their back yards.”¹⁸⁶ And, while he claimed that most *C. indica* grown in New Mexico was “for use by the growers,” Bernalillo County sheriff Felipe Zamora told the Associated Press that “it is frequently grown in gardens and cornfields.”¹⁸⁷

Perhaps the best example of *Cannabis* as a threat borne of Americans’ immediate environment comes from a full-page, illustrated spread on marijuana in the *Denver Post* on December 30, 1928. In bold font across the top of the page, the headline and subhead described a devil that grew next door: “A Home-Grown New Drug That Drives Its Victims Mad: Raised in Any Backyard and Smoked in Cigarettes, Marihuana Is the Most Deadly Narcotic Now Fought by the U.S.” The immediate call of attention to the drug plant’s presence in places as common as the American backyard, as well as to its cigarette disguise, amplified the marijuana threat. The accompanying article focused on marijuana growth and consumption in New York City’s Latin Quarter, but the message would hardly have been lost on Denver readers already aware of their own city’s burgeoning marijuana trade. The article is basically an amalgam of contemporary American opinions of marijuana: it tells of a “hardy plant” that “grows readily in the New York climate” and in vacant lots; it notes that “most of the purveyors are of Latin extraction,” and that users experience sensations “rivaling even those produced by opium.” The article even notes that “[m]arihuana smoking appeals to a certain bohemian, free-thinking, imaginative group of artists, writers, musicians, and others.”¹⁸⁸ This observation marked marijuana’s prevalence in the contemporary music scene, but also foreshadowed the drug’s future place in the counterculture of the 1950s, ‘60s, and ‘70s.

The proximity and insidious nature of the threat was brought home by the images accompanying the article. A photograph that ran with the article titled “Scene of Planting”

¹⁸⁶ “Smuggling of Mexican Drug into Pueblo Schools Charged,” *Denver Post*, February 18, 1927.

¹⁸⁷ “Federal Laws are Necessary to Get Marijuana User,” *Las Vegas (NM) Daily Optic*, February 16, 1934.

¹⁸⁸ Bruce Grant, “A Home-Grown New Drug That Drives Its Victims Mad,” *Denver Post*, December 30, 1928.

allegedly shows *Cannabis* growing amidst common brush in a vacant lot in New York.¹⁸⁹ A set of illustrations that run across the middle of the page depicts a young, nicely dressed woman picking flowers off an inaccurately drawn *Cannabis* plant, rolling them into a cigarette, and presenting a cluster of flowers for a “close-up of the weed.” The sources indicate that most marijuana dealers at the time were men, so why did the author draw a young, white woman and not a disheveled-looking Mexican man—who the article implied was the true source of the drug? It is possible the woman represents a “bohemian” in New York. However, as the primary purpose of the spread is to convey the marijuana threat, it is more likely that the illustrator chose to make his *Cannabis*-preparing subject look more like someone who could be the reader’s daughter, sister, or other relative. One can only imagine how parents of older children in Denver, already concerned about the availability of other drugs, reacted when they saw an innocent-looking young woman holding a “narcotic” that could be “freshly plucked” from the lot down the street.¹⁹⁰

The *Denver Post* spread in 1928 shows more clearly than most reports that, in addition to its reported effects, public anxiety over *C. indica* was largely rooted in the drug plant’s proximity to people within their environments. This explanation invokes the results of humans’ millennia-long coevolution with *Cannabis*, and gets us closer to fully understanding the anti-marijuana hysteria that developed in the 1920s and early ‘30s and ran virtually unchallenged until the 1970s. A combination of race- and class-charged drug folklore, based on both the American and Mexican experience with drugs, as well as the knowledge that a drug plant grew literally too close to home, made marijuana into a public menace in the 1920s.

¹⁸⁹ Ibid.: On the photocopy of the newspaper I obtained, it is impossible to tell whether the plants described as “marijuana” are indeed *Cannabis*; nevertheless, a photograph that visually declared a deadly drug to be lurking on one’s city block undoubtedly had a powerful effect on American readers.

¹⁹⁰ Ibid.

Propaganda, Politics, and Propagation

If culture and nature combined to spark the marijuana menace in the 1920s, then Harry Anslinger and William Randolph Hearst stoked the flames and puffed it up to a national conflagration in the 1930s. Anslinger, the former assistant prohibition commissioner, was named head of the newly formed Federal Bureau of Narcotics in 1930.¹⁹¹ One year later, upon his return from a uniform state law convention in Atlantic City, Anslinger emphatically declared to the press that marijuana was a “menace” that gives users “the courage to perform criminal acts.”¹⁹² Yet he stopped short of suggesting a federal ban, and his reasoning showed that he understood, at least partly and for the moment, the nature of *Cannabis*: “Mr. Anslinger believes that the needed legislation must be left to the states, due to the ease with which the plant can be grown in any American climate.”¹⁹³ Indeed, at the time he could hardly concern himself with marijuana, because as Martin Lee put it, “Anslinger had only three hundred G-men on his roster, hardly enough to tackle heroin and cocaine let alone a common weed.”¹⁹⁴

But Anslinger changed his tune after the Bureau’s budget was cut during the Depression. He once viewed *C. indica*’s ubiquity as a potential drain on bureau resources; now, he saw it as an opportunity to build a well-funded, *Cannabis*-crushing force. Beginning around 1934, the narcotics chief embarked on a feverish propaganda campaign. He played on the racial and gender tensions of the Depression, arguing that marijuana made black men and white women mingle in jazz clubs, and that it drove Mexicans to violent crime.¹⁹⁵ Meanwhile, reporters working for Hearst, the media mogul known for his papers’ sensational headlines, took Anslinger’s unsubstantiated claims about marijuana-induced violence and ran with them, producing a litany

¹⁹¹Lee, *Smoke Signals*, 48.

¹⁹²“State Laws Urged to Cut Growing Use of Hashish,” *Helena Independent*, October 4, 1931.

¹⁹³Ibid.

¹⁹⁴Lee, *Smoke Signals*, 49.

¹⁹⁵Ibid., 51-2.

of articles that served to terrify the public. Hearst's papers churned out headlines like "Murder Weed Found Up and Down Coast," and never missed a chance to demonize Mexican-Americans, a group for which Hearst held special, personal contempt.¹⁹⁶ Put simply, the Anslinger and Hearst-led anti-marijuana campaigns of the 1930s were a steroid-injected version of *The Denver Post's* 1928 spread: the marijuana threat was immediate, foreign, and deadly.

On the heels of the multi-pronged propaganda campaign and with vigorous testimony by Anslinger, Congress passed the Marihuana Tax Act in August 1937. The law worked as a prohibitory tax—it required anyone growing or selling *Cannabis* to pay an exorbitant fine for a license, which the government never intended to grant, and thus made any purchase or possession of *Cannabis* a federal offense. The Act did allow for the drug to be purchased for medical use, but Anslinger's propaganda campaign effectively delegitimized *C. indica* as a medicine.¹⁹⁷ The Act gave authorities at every level, including those in the West who had been clamoring for stronger marijuana laws for decades, the power to arrest and send to prison anyone who grew, bought, or possessed *Cannabis*.

For American society writ large, the propaganda campaigns leading up to the Tax Act functioned as a kind of memory wipe. Not only had they silenced *C. indica's* decades-long history of legitimate medical use in the U.S., but they were so successful at turning the country against marijuana that virtually no one said a word about *C. sativa*, which the Act also banned. Hemp, the plant that helped Americans declare their independence, battle the British navy, and

¹⁹⁶Ibid., 50-2.

¹⁹⁷Ibid., 54: Lee notes that Dr. William Woodward of the American Medical Association was the lone challenger to Anslinger's testimony that *Cannabis* had no therapeutic value.

cover wagons on the road West, was now destined to be associated and conflated with marijuana, the “Assassin of youth.”¹⁹⁸

Just how big was the “marijuana menace” in 1937? Was marijuana so popular that it mandated federal prohibition? It is estimated that some 50,000 Americans were smoking the drug that year.¹⁹⁹ That number seems low, especially in light of Anslinger’s propaganda. To be sure, there is no truly accurate way to gauge the exact amount of people who used an illicit drug at any one time. But even if it were doubled, even if that estimate was just half of the country’s marijuana smokers, the number could not have lived up to the hype generated by the Hearst-Anslinger propaganda machine. Indeed, most Americans who grew *C. indica* at this time grew small amounts for the black market or for personal use, and the rest was smuggled in from Mexico.²⁰⁰ As Richard Bonnie and Charles Whitebread note, “use was still concentrated geographically and socioeconomically; commerce in the drug was a casual endeavor, not a major enterprise.”²⁰¹

If only a small percentage of Americans used marijuana in the 1930s, cultivation of the drug was concentrated in the West. In addition to the major cities and the large tracts of irrigated, agricultural landscapes in places like Colorado and Montana, the climate in places like southern California continued to offer growers optimal conditions. California’s state narcotics inspector claimed in 1935 that “[b]ecause the California climate is ideal for its cultivation here, the marijuana weed is the chief problem in the fight against narcotic traffic.”²⁰² In the early thirties

¹⁹⁸ Quote attributed to Anslinger: Lee, *Smoke Signals*, 52, 54; I am referring here to the type of historical silencing articulated by Caribbean historian Michel Rolph-Trouillot; see Michel Rolph-Trouillot, *Silencing the Past: Power and the Production of History* (Boston: Beacon Press, 1995), 48-67.

¹⁹⁹ *Ibid.*, 55.

²⁰⁰ Rendon, *Super Charged*, 65; In 1939, the governor of California asked Mexican President Lazaro Cardenas for help in curbing the marijuana traffic in his state: “Olson Asks Cardenas Help in Stamping Out Marijuana,” *Bakersfield Californian*, November 24, 1939.

²⁰¹ Bonnie and Whitebread, *Marijuana Conviction*, 181.

²⁰² “Marijuana Weed Narcotics Problem,” *Oakland Tribune*, January 12, 1935.

authorities in Denver, across northern Colorado, and in Montana seized *C. indica* from yards and farms.²⁰³ In 1935 in Basin, Wyoming, officers pulled up 500 pounds of *C. indica* “which was growing in the gardens of Mexicans in the southern part of the county.”²⁰⁴

It is no surprise that the first two people arrested under the Tax Act, Samuel Caldwell and Moses Baca, were Coloradans of Mexican origin. A report in *The Denver Post* in September 1937 outlined who would be targeted under the new law in the West: “Certain areas of the Rocky mountain states where there is a concentration of laborers from outside the United States have been troubled for years in trying to curb the use of the narcotic weed.”²⁰⁵ Denver was one of those areas. Under the new law, Caldwell, a 58-year-old small-time dealer, received four years in Leavenworth penitentiary.²⁰⁶ Baca, 26, got eighteen months in prison for possession. If the “marijuana menace” wasn’t real, the punishments for trading in the drug after 1937 certainly were.

Kings of Kif

Instead of abating, growth of *C. indica* in Colorado and across the West seemed to increase after the Tax Act. In 1938, a representative of the Colorado State Board of Health proclaimed that the state “is one of the greatest centers for the cultivation of the marijuana.”²⁰⁷ Indeed, in August 1937, just before the Act took effect, sheriff’s officers in Walsenberg, Colorado pulled up nearly 600 pounds of the plant, “hidden in corn fields.”²⁰⁸ Two large-scale growing operations that ran into the 1940s also add weight to the Board of Health’s declaration.

²⁰³ “Seize \$35,000 Dope,” *Woodland Daily Democrat*, August 30, 1931; “Rosebud Authorities Discover Marijuana,” *Billings Gazette*, September 25, 1931; “Marijuana Ring is Broken by Arrest of Five at Longmont,” *Denver Post*, November 24, 1933; “Marijuana Ring is Broken by Arrest of Five at Longmont,” *Denver Post*, November 24, 1933; “Drive is on to Stamp Out Marijuana Weed, Grown as Narcotic,” *Denver Post*, August 15, 1934.

²⁰⁴ “Wyoming Officers Root Up Marijuana,” *Billings Gazette*, August 8, 1935.

²⁰⁵ “U.S. to Aid Rocky Mountain States Fight Marijuana,” *Denver Post*, September 10, 1937.

²⁰⁶ “Denver Court Imposes First U.S. Marijuana Law Penalties,” *Denver Post*, October 8, 1937.

²⁰⁷ Lucy H.R. Turner, “State Board of Health Fights the Dread Evils of Marijuana Traffic,” *Denver Democrat*, March 26, 1938.

²⁰⁸ “Sheriff Confiscates \$5,000 in Marijuana,” *Denver Post*, August 5, 1937.

By 1941, Mexican immigrant Melitone Garcia oversaw perhaps the state's largest home-grown marijuana ring. With the help of at least a dozen others, the 53-year-old Garcia grew the plant on his farm in Hermosa, Colorado, and stashed containers of the powdered flowers in a quarry near Windsor. The quarry, in addition to other "outlets" throughout the state, was where he sold the drug to blindfolded customers, which Garcia said included well-known Denverites. Members of his operation even supplied a Denver "hashish parlor," a place where marijuana users could hang out and smoke the drug discreetly.²⁰⁹

Officers gave Garcia the nickname "Marijuana King," but five years later they had to crown a new one.²¹⁰ In 1946, Manuel Hernandez, a 42-year-old Mexican-American and former beet worker, grew nearly 7,000 plants on his farm in Mead, Colorado.²¹¹ While most raid reports contain little background information on marijuana growers, the article on Hernandez notes that he was "illiterate" and could barely speak English. Yet, like Garcia, his illegal operation allowed him a piece of the American dream: Hernandez owned two cars, and at the time of his arrest had recently paid \$8,000 cash for an apartment building in Denver.²¹² Few other immigrants, confined to meager employment on farms or railroads, could have amassed such wealth. Court records are not available for Garcia's case, but records from Hernandez's confirm that he received eighteen months in prison.²¹³ His relatively short sentence is curious, considering he was eligible for up to five years in prison. Three of the five charges against him, two for possession and one for growth, were dismissed in court. Hernandez was charged with cultivation of 15,000 plants and authorities found only 7,000, which may explain the growth charge's

²⁰⁹ "Dope Raiders Jail 15 Colorado Suspects," *Denver Post*, January 12, 1941.

²¹⁰ *Ibid.*

²¹¹ "\$60,000 Marijuana Confiscated And Alleged Wholesaler Arrested," *Rocky Mountain News*, June 13, 1946.

²¹² *Ibid.*

²¹³ *United States v. Manuel Hernandez*, F. (10th Cir. 1946)

dismissal.²¹⁴ Hernandez also had a wife and ten children, which may have caused the judge to sympathetically shorten the sentence. It is unknown whether Hernandez's family remained on his farm after his arrest.

Other immigrants throughout the West tried to emulate the success of Garcia and Hernandez. In 1938, federal officers found an estimated \$5,000 worth of *C. indica* growing on a ranch near Oceanside, California.²¹⁵ Near Sidney, Montana the following year, the state horticulture inspector found some 2,500 specimens of cultivated *C. indica* clustered around irrigation ditches; no arrests were made immediately.²¹⁶ In 1941, the same year cops smashed Garcia's operation in Colorado, a two-month long investigation by federal officers in California revealed that Ramona Rodriguez, her husband Avila, and four others of Mexican origin had grown *C. indica* on "islands in the Sacramento delta region" and sold the marijuana in Oakland.²¹⁷ For six months before they arrested him in 1947, sheriff's deputies in Cowell, California watched 61-year-old rancher Mike Villasenor grow an estimated \$200,000 worth of the plant.²¹⁸ Evidently, Garcia had been right in 1941 when he told undercover federal officer John Van Treel that "there was a fortune to be made" selling marijuana.²¹⁹

²¹⁴ Ibid.

²¹⁵ "\$2000 Marijuana Is Seized; 2 Men Held," *Bakersfield Californian*, October 3, 1938.

²¹⁶ "Find Marijuana," *Billings Gazette*, July 30, 1939.

²¹⁷ "Six arrested in Drug Drive," *Oakland Tribune*, December 26, 1941.

²¹⁸ "Cowell Farmer Faces Narcotic Charges After Raid Nets \$200,000 in Marijuana," *Oakland Tribune*, July 15, 1947.

²¹⁹ "Dope Raiders Jail 15 Colorado Suspects," *Denver Post*, January 12, 1941.

Stung

While authorities were quick to target Mexican-Americans as marijuana growers or users, sometimes they went too far. Leo Acosta was a World War II veteran who fought in the Pacific Theater; he also had a brother, Malo Acosta, who was involved in the marijuana trade.²²⁰ On March 18, 1948, Leo Acosta was drinking a beer at the Diamond Café in Denver when he was approached by Leroy Lockett, an acquaintance who, unbeknownst to Acosta, was also an undercover officer. Pointing out a man in dark glasses in the café, Lockett said the man refused to sell him marijuana because Lockett owed him money. After initially refusing to help him, Acosta eventually took \$15 from Lockett and met the man in dark glasses at Julian Sito's pool hall, where he swapped the cash for a tin of marijuana. Upon returning to Lockett, Acosta refused payment for the transaction but was still arrested. He later told a probation officer, "I just did this for Lockett because I thought he was a friend of mine," adding that he had "never done anything like this before."²²¹

Before his case, Acosta sent a request to the jury claiming that "the offenses here charged were conceived and planned by officers or employees of the government." It was rejected, and on May 14, 1948, the U.S. Navy veteran and new father was sentenced to two years at Leavenworth.²²² Apparently, in the eyes of the court, Acosta's insistence that he had been set up, his lack of past involvement in the trade, and his honorable military service were not enough to separate him from his family's Mexican origins or his brother's marijuana dealings.

Acosta was not alone. I found the details of his case while surveying more than eighty marijuana case files in Colorado's U.S. district court docket from 1938 to 1952; I did not record

²²⁰ United States v. Leo Acosta, F. (10th Cir. 1948); Pasquale Marranzino, "Marijuana Raid Shatters Haven of Drug Addicts," *Rocky Mountain News*, April 10, 1948.

²²¹ United States v. Leo Acosta, F. (10th Cir. 1948): Defendant's Statement to Probation Officer.

²²² United States v. Leo Acosta, F. (10th Cir. 1948): Judgment and Commitment.

the exact percentage, but nearly all the defendants in these cases had Hispanic surnames.²²³

While it is certainly likely that many of those brought before the court were in fact guilty, the sting tactics used in Acosta's case suggest that others, too, were unfairly targeted. A curious case from Montana in 1940, in which a Mexican-American "transient" appeared to be caught with a few tins of marijuana but was later acquitted of the possession charge, also highlights the limits of law enforcement's prejudice.²²⁴ Yet by the 1940s, as more non-Hispanic names like Thomas Hill, Alexander Evans, Joe Bacino, and Clarence Sells began appearing in arrest reports, authorities in the West could no longer afford to target only Mexicans in their marijuana manhunts.²²⁵

Federal Failure

By the 1950s, law enforcement and anti-drug officials had convinced most of the American public that marijuana prohibition was necessary. After 1937, authorities largely did what they had done before the Tax Act, but with increased fervor and harsher punishments: they locked up thousands of people and destroyed thousands of plants. But even with those victories, the government did not stop Westerners—or other Americans, for that matter—from growing and smoking marijuana. *C. indica* was easy enough to grow, especially in climates like California's or in hidden patches on farms and yards throughout the West. Marijuana was profitable and available; by 1946 a grower could expect to sell a pound for at least \$100, and by 1951 marijuana cigarettes typically sold on the street for a dollar.²²⁶ Meanwhile, thousands of

²²³ U.S. District Court, 10th cir., 1938-1952, case no.'s 8730-9151.

²²⁴ "Marijuana Is Found on Transient," *Montana Standard*, October 23, 1940; "Recess Ordered in Heide Trial," *Montana Standard*, November 10, 1940.

²²⁵ "Marijuana Raid Jails Six Suspects," *Oakland Tribune*, October 26, 1940; "U.S. Agents Bought Dope to Trap Ring," *Denver Post*, August 30, 1948.

²²⁶ "\$60,000 Marijuana Confiscated And Alleged Wholesaler Arrested," *Rocky Mountain News*, June 13, 1946; Al Nakkula, "Illicit Marijuana Crops," *Rocky Mountain News*, June 1, 1951.

pounds of marijuana continued to flow across the border.²²⁷ Largely because of the nature of humans—people everywhere seek pleasure—and of *Cannabis*—it grows well in human-altered environments, like the West—federal prohibition had failed.

The government had been there before. From 1920 to 1933, it found enforcement of alcohol prohibition costly and impossible, and so repealed the law. Americans, like most people around the world, enjoyed their pleasure-giving booze, and no amount of legislation or enforcement could stop them from getting it. The same was true for *Cannabis*, but the typhoon of fear unleashed during the 1930s by Harry Anslinger and other Americans leery of foreigners and drugs delegitimized any comparison. Essentially, the Marihuana Tax Act was an attempt by the U.S. government to control minority populations—mostly Mexicans and African-Americans—via drug enforcement.²²⁸ Although the feds would never have called marijuana “nature,” the fact that it is a flower—a product of sunlight, water, and nutrients—means that it is. Therefore, from the early 1900s until the mid-1940s, it was Mexican- and African-Americans’ specific *relationship* with *C. indica*, the plant that helped them pay bills, treat minor ailments, de-stress, or make music, that created the anxiety necessary for prohibitive action. But as a plant adapted to myriad human environments over thousands of years, *C. indica* could be grown pretty much everywhere, and this fact sabotaged prohibitive action from the start. Thus, relationships with nature provided on one hand the impetus for control, and on the other the means to subvert it.

The experience of Assistant Police Chief Willie Bauer in Beaumont, Texas, perfectly illustrates this paradox of prohibition. In 1958, noting that “rookie cops knew little about the weed,” Bauer acquired some *Cannabis* seed and planted a patch on his lawn.²²⁹ When the plants

²²⁷ Douglas Larsen, “‘Reefer’ Habit Hops Up in America,” *Bakersfield Californian*, September 9, 1948; Bob Considine, “On The Line,” *Bakersfield Californian*, March 11, 1949.

²²⁸ Bonnie and Whitebread, *Marijuana Conviction*, 151, 153.

²²⁹ “Officer Winner Over Marijuana,” *Billings Gazette*, February 19, 1958.

were nearly eleven feet tall, he harvested some for the police school, cut the rest down, and burned them. Sprouts came back, and he pulled them up. They came back again; he pulled them up. When the sprouts appeared a third time, Bauer doused his garden in oil and set it on fire. The sprouts just kept coming. “For several days,” an article on the incident reported, “Bauer spent most of his spare time trying to mow faster than the plants grew,” until he eventually came up with a final solution: he ordered a concrete slab laid over his garden and built a shed on top of it. As the article does not say where Bauer obtained the seeds, he may have sown some hardy hemp instead of *C. indica*. But, as a law officer vexed by the concerns of his day, he can at least be trusted to know he was dealing with *Cannabis*, and not some other weed.

Primed for Popularity

At the close of the 1950s, then, Western Americans’ experience with *Cannabis* had changed greatly in the more than 100 years since Bryant’s trek across the Sierras and John Sutter’s ragged hemp crop. *Cannabis* was no longer regarded as the tough, valuable cordage crop it was in Sutter’s time. Just decades afterward, a tropical species, *indica*, began to colonize North America, courting an entirely new continent of human allies with its psychoactive gifts. Its remarkable adaptive qualities allowed it to thrive in the harsh environments of Mexico and the American West, and it was able to grow well enough in less ideal temperate environs—like New York City or Chicago—by the 1920s.

In the mid-twentieth century, however, most Americans were not allies of *C. indica*.

Zachary Falck summarizes it nicely:

“*Cannabis* criminalizers thought urban social order depended on destroying a plant that some Mexican immigrants had cultivated in their homeland; that some African-American artists, dancers, and musicians experimented with or used in social gatherings; and that flourished on roadsides and in vacant lots where jobless and work-seeking Americans congregated and traveled. In criminalizers’

minds, these particular groups made the plant dangerous, and the plant made these people dangerous.”²³⁰

Its psychoactive nature meant that a vehemently anti-drug public would understand *Cannabis* only as a toxic instrument of degeneration, the same way people felt about opium or cocaine. In such a context, *Cannabis* found itself the target of extermination, and those who grew or used it were labeled, stereotyped, manipulated, arrested, fined, and locked up.

But for those who managed to avoid the reach of the law, the plant was at various times a source of income, a household remedy, and an escape from the realities of a racially segregated, hyper-consumerist, military-industrial America that emerged in the fifties. Indeed, the nature of *Cannabis*, the mind-shifting outlaw plant, the insufferable weed that nothing short of a concrete sheet could keep down, lent itself quite well to the minds and voices of dissent.

²³⁰Falck, *Weeds*, 79.

Part II

From “Acapulco Gold” to “Emerald” Green: The Making of Marijuana America, c. 1960-1990

On July 2, 1959, the *Bakersfield Californian* ran an interview with Allen Ginsberg that focused on the influential beat poet’s recent self-advertisement and his response to those who believe he had “gone commercial.”²³¹ Yet reporter Ward Cannel decided to lead with a more scandalous, eye-catching claim—Ginsberg’s call for the nation to “switch to marijuana: it’s milder, pleasanter, more spiritual, less conservative, less conforming.”

For those Americans, and especially for those of Ginsberg’s fellow Californians who wanted to make the switch, there was plenty of marijuana available. Indeed, despite the decades-old federal drug war, the *Pasadena Independent* in 1960 referred to a “tidal wave of drugs” pouring “across the Mexican border.”²³² Citing a preliminary report from the Senate Juvenile Delinquency subcommittee, which lobbied for more resources to combat trafficking, the *Independent* noted that “[o]ne hundred percent of the marijuana seized in police raids in California comes from Mexico.” Southern California was a gateway for not only Mexican but also smaller amounts of Columbian and Jamaican marijuana, as well as large amounts of heroin.

While Mexico would continue to be the United States’ main source of marijuana until the 1980s, in the 1960s the North American *Cannabis* gene pool began to diversify. Soldiers returned from the U.S. war in Vietnam with Old-World varieties of tropical *indica*, and growers (in some cases, the veterans themselves) introduced these to California and other places in the

²³¹ Ward Cannel, “The Question Is: Can a Beatnik Remain a Beatnik in a Brooks Brothers Shirt?” *Bakersfield Californian*, July 2, 1959.

²³² Bill Broom, “Bolder Steps Asked to Cut Dope Traffic,” *Pasadena Independent*, June 13, 1960.

West. Hippies searching for a shorter-growing, frost-hardy strain brought back the broad-leafed Afghani *indica* in the mid-1970s. Growers in the 1980s imported a variety of seeds from Amsterdam. During this time Americans began developing their own distinct types of marijuana, which prohibition helped to make more available and more potent; militant crackdown on outdoor growth helped push the industry indoors, where growers could safely conduct breeding experiments and find the ideal combinations of water, light, and nutrients that would result in the highest-quality kick. In short, the counterculture and global travel of Americans in the 1960s and 1970s laid the foundation for American marijuana's next great evolutionary step: in roughly thirty years, growers in the western U.S. transformed simple, outdoor-grown varieties of Mexican *indica* into hybrid, indoor-grown American masterpieces.

A Different Beat

In the late '50s and early '60s, those who grew or dealt marijuana on both sides of the border looked at the easy-growing, popular herb and saw dollar signs, but Ginsberg and the rest of the Beat Generation looked to *Cannabis* for inspiration. By the late 1950s, Ginsberg, Jack Kerouac, and a host of other young artists, musicians, and poets, many residing in San Francisco's Haight-Ashbury neighborhood, represented a restless minority fed up with mainstream culture. They believed society assaulted individualism and was overrun with conformity. These individuals, who were often stereotyped as leftists but actually represented a broad spectrum of political views, were frustrated with the military-industrial complex's hard rejection of philosophic pursuits, and likely began experimenting with drugs like marijuana in the privacy of a jazz club or at a poetry reading. As Martin Lee notes, it was these middle-class minds that began to popularize marijuana use in the United States:

“As cultural expatriates, the Beats linked *Cannabis* to a nascent groundswell of nonconformity that would develop into a mass rebellion in the years ahead. They

were the key transmission belt for the spread of marijuana into mainstream America. A trickle of white, middle-class pot smokers, once confined to jazz clubs, would become a nationwide torrent during the social tumult loosely known as ‘the Sixties.’”²³³

The Beats searched for new experiences, new ways of understanding reality, so it makes sense that as part of their search they would pick up one of the cheapest and most widely available drugs in the West. But to people like Ginsberg, the appeal of *Cannabis* was not just “for kicks;” the drug allowed them to “explore consciousness,” to slow down and experience the depth of things.²³⁴ *Cannabis* activists like Ginsberg, who had seen many of his Beat contemporaries struggle with abuse of other drugs, also promoted the plant’s non-toxic and non-addictive nature.²³⁵

Recent research on *Cannabis* evolution may provide a reason why the marijuana Ginsberg and other Americans smoked in the ‘60s got their minds going. It was a narrow-leaved, tropical variety of *C. indica* grown in Mexico, a New World-adapted descendant of tropical Indian varieties. It delivered a high distinct from the broad-leaved *indica*, which was endemic to the Central Asian mountains. That Old-World *indica* had been selected for higher THC content for millennia and delivered a potent, physical, sedative high. By contrast, the New-World *indica* the Beats smoked in the ‘50s and ‘60s had spent centuries adapting to an entirely different range of environments in tropical and temperate America, and therefore its resin produced a different profile of psychoactive effects: it was a relaxing, yet head-clearing high that facilitated creativity and conversation.²³⁶

This oft-overlooked evolutionary detail is not insignificant. It didn’t matter just that Ginsberg and the Beats, and the hippies they inspired, smoked marijuana; the specific *nature* of

²³³Lee, *Smoke Signals*, 73.

²³⁴*Ibid.*, 74; Pollan, *Botany of Desire*, 152.

²³⁵Lee, *Smoke Signals*, 75.

²³⁶Clarke and Merlin, *Evolution and Ethnobotany*, 130, 302.

that marijuana also mattered, and that nature would change over time. In the 1970s, for example, American hippies traveled the globe in search of a frost-hardy variety of drug *Cannabis* that would flower more reliably in temperate latitudes. They brought back seeds of highland, broad-leaf *indica* varieties from Afghanistan. Had Ginsberg been smoking the Afghani *indica*, he would likely have had a different experience of ideas and conversation under the influence than he did with the tropical *indica*. As it was, Ginsberg echoed famed jazz trumpeter and marijuana smoker Louis Armstrong when he said that under marijuana's influence "he grasped the complex, inner structure of jazz and classical music compositions." Ginsberg said he would smoke and go to art museums, where he "became acutely aware of 'awe and detail' while stoned."²³⁷

It is not an untenable suggestion that the intensely physical high of Afghani *indica* might have prompted Ginsberg to take a nap instead of walk around an art museum. It is also not outrageous to suggest that we would have at least slightly different songs and albums from such marijuana-inspired musicians as Bob Dylan and The Beatles if we jumped into a time machine and stuffed their joints with pure Afghani.²³⁸ Michael Pollan observed that the shift in consciousness induced by drug plants may "function as a kind of cultural mutagen" that leads to new ideas, many of which may be "useless or worse," but some of which "inevitably turn out to be the germs of new insights and metaphors."²³⁹ America's marijuana-influenced jazz and counterculture movements can be considered evidence for Pollan's claim, but the divergent evolutionary journeys of *Cannabis* remind us that different types of psychoactive substances, even within the same plant species, can have different effects.

²³⁷Lee, *Smoke Signals*, 74.

²³⁸For marijuana consumption by, and influence on The Beatles and Bob Dylan, see Lee, *Smoke Signals*, 80, 103.

²³⁹Pollan, *Botany of Desire*, 149.

While most of the artists, musicians, and students of the Beat generation were content smoking marijuana grown in Mexico, others made attempts to grow their own. Aside from having a personal supply, there were more practical reasons to grow pot; unless they were Ginsberg or Kerouac, poets, musicians, artists, and students didn't make a whole lot of money. The unwillingness of some to take traditional, wage-earning jobs—an act they would have considered conformist—meant they had to find other sources of income, and what better way than by providing their fellow pot-smokers with some home-grown herb? In 1958, freelance artist Arthur Fresneda and his wife evidently planned to grow *C. indica* in their new Oakland apartment; they were both arrested when police discovered Fresneda's plot of 120 *Cannabis* seedlings planted in the bottom of a beer carton.²⁴⁰ Four years later in Mendocino City, 25-year-old Donald Treadwell, a local drummer, and 31-year-old James Mion, an artist from San Francisco, grew more than 120 plants outside of a "weather beaten frame dwelling" that hosted pot-smoking gatherings.²⁴¹ That same year, David H. Findley, a student activist at the University of California, grew some 60 *C. indica* plants beneath a cottage near San Pablo's boat harbor.²⁴²

It is important to remember that in California and elsewhere in the late fifties and sixties, not all Beats were artists, nor were all artists Beats. Not all marijuana smokers were Beats, either; smoking pot had always been popular with the Mexican and black laboring classes, and the habit had been rising in popularity among white, middle-class youth, especially in California, since the 1950s. Indeed, in 1957, one fifteen-year-old boy in La Mirada, attributing his success to a "wonderful desert climate," managed to raise 23 *C. indica* specimens in a wash tub.²⁴³

²⁴⁰ "Artist, Wife Arrested on Dope Charge," *Oakland Tribune*, March 10, 1958.

²⁴¹ "Marijuana Garden Downfall of Mendocino City Suspects," *Ukiah Daily Journal*, August 13, 1962.

²⁴² "Riot Figure Nabbed On Dope Count," *Hayward Daily Review*, July 22, 1962.

²⁴³ "Nab La Miradan, 15, on Dope Charges," *Long Beach Press Telegram*, October 31, 1957.

Working-class whites were getting involved as well.²⁴⁴ But the number of reports of marijuana growth and use by young, middle-class adults of the artist- and student-type spiked considerably in the early 1960s, largely because specific qualities of tropical *C. indica* appealed to the nascent counterculture.

A Matter of Vision

The counterculture of the sixties soon extended well beyond California and the major cities. It rippled across university campuses, where students rallied for Civil Rights, protested the American War in Vietnam, and smoked marijuana.²⁴⁵ A survey of students at Colorado College in 1968 revealed that 41 percent had smoked marijuana and 67 percent favored its legalization.²⁴⁶ Even conservative Montana was not immune; *The Helena Independent*, quoting the student newspaper at the University of Montana, reported in 1966 that between two and three hundred students “were buying, selling, and smoking marijuana on and off campus.”²⁴⁷ The student newspaper claimed that “three main groups ... were bringing the drug from Denver and the West Coast ... and selling it.”²⁴⁸ The following summer, Montana State University art teacher Sidney Kurland and ten other adults were charged with selling marijuana to minors.²⁴⁹ In a follow-up article, *Billings Gazette* reporter Dick Gilluly appealed to the “unpolluted” environment around Bozeman to distance the city from corrupting influences like the filthy counterculture and its marijuana:

“Bozeman is clean and pleasant appearing. Rugged blue mountains to the south and east seem almost literally to shine in the clear and unpolluted air. Tree-lined

²⁴⁴ “Sheriff Ends Marijuana Farm Project,” *Bakersfield Californian*, May 19, 1962; “10 Suspects on Dope Charges,” *Star News* (Pasadena, Calif.), October 23, 1964; “Three face marijuana charges,” *Walla Walla Union Bulletin*, September 10, 1969.

²⁴⁵ Richard Goldstein, “Marijuana Use Increasing Among College Students,” *Helena Independent*, November 25, 1965; Bernard Gavzer, “‘Grass’ Grows on Many College Campuses,” *Billings Gazette*, June 6, 1966.

²⁴⁶ “Survey at CC Polls Dope Views,” *Denver Post*, April 28, 1968.

²⁴⁷ “Students Using Marijuana, UM Paper Reports,” *Helena Independent*, October 20, 1966.

²⁴⁸ *Ibid.*

²⁴⁹ “Teacher Among Those Charged in ‘Pot’ Case,” *Billings Gazette*, July 24, 1967.

residential streets are well-maintained, and the MSU campus stretches beautifully landscaped across a gentle slope on the southeast.”²⁵⁰

The description reads more like lines from a tourist brochure than the third paragraph of an article on drug crime. Perhaps that was the point—maybe Gilluly thought the town’s reputation needed polishing after the arrests. Yet after that sunny description of Bozeman, the article goes on to paraphrase the local police chief: “Cutting indicated there may be a continuing marijuana problem in Bozeman, but, he said, “There could be (such a problem) in anybody’s community”—even, apparently, “clean and conservative” ones.²⁵¹

Certainly Bozeman’s voting bloc was conservative. But why did Gilluly call the city “clean,” and what does it have to do with marijuana? Influential landscape writer J.B. Jackson identified a “political” or officially modified landscape, as opposed to the “vernacular,” or unofficially modified landscape, noting that the former, promoting good order, would produce among other things “law-abiding citizens.”²⁵² The two landscapes often occupy the same space, but the political one is typically more “visible”; most order-minded Americans usually notice things like “Tree-lined residential streets” before they notice, say, adults selling marijuana to college students.²⁵³ In this context, Gilluly’s view of the Bozeman landscape was clearly an *official* one, in which “well-maintained” streets run up to a “beautifully landscaped” campus, and a well-ordered town kept itself “clean”—free from vernacular elements like drugs. Because it is outlawed, there is no place for a drug plant like *C. indica* in such an official landscape. Most of Bozeman, and indeed most of America at the time probably envisioned their local landscapes in much the same way. Hippies, however, did not.

²⁵⁰ Dick Gilluly, “MSU Professor Denies Drugs Found in Home,” *Billings Gazette*, August 2, 1967.

²⁵¹ *Ibid.*

²⁵² Jackson, *Discovering the Vernacular Landscape*, 39-40, 149-50.

²⁵³ *Ibid.*, 32.

By the mid-1960s, the counterculture had carved out a niche on college campuses and in the urban American West, but not without resistance. Claiming that “raw marijuana is coming into Seattle at the rate of 100 pounds a day,” Richard Bradley, a juvenile probation officer in Sequim, Washington, blamed hippies for introducing the drug: “Bradley said there are approximately 23 hippies living in the area and thinks there will be an invasion of them this summer. He stressed their demoralizing influence on some of the local youth. ...He hopes the community will make it known collectively they are not wanted.”²⁵⁴ A 1967 editorial in the *Helena Independent* contrasted the patriotism of the 1940s with the “unbelievably vile demonstrations” of the 1960s: “Twenty-six years ago ... young men huddled in damp foxholes, afraid to light a smoke and wishing they had a shave, in contrast to the bearded creeps putting marijuana in today’s hippie pads.”²⁵⁵ A year after San Francisco attorney James White submitted an initiative in Sacramento to legalize and regulate marijuana in California, columnist Russell Baker mocked the cause, and the general air of protest in the sixties, in Pasadena’s *Independent*: “many people spend more time dissenting than working. We have dissenters actively defending marijuana, Communism, extramarital sex, Mao Tse-tung, rioting ... draft-dodging,” he wrote, “Is there no one in this entire country with the courage to stand up and defend air pollution?”²⁵⁶

Pushback from conservatives limited the places hippies could live, but it was not their only problem in the late sixties. Hippies were agents of change, but they were not immune to it. In 1967, the rise of street gangs and an increasingly violent and organized drug trade, coupled with a spike in police raids, apparently convinced many hippies to leave their stronghold of San Francisco, even during the “summer of love”: “some of the most ‘beautiful’ people in the San

²⁵⁴ “Probation Officer Warns Area Parents,” *Port Angeles Evening News*, May 8, 1968.

²⁵⁵ “A ‘Popular’ War,” *Helena Independent*, December 7, 1962.

²⁵⁶ Russell Baker, “Beatniks, Marijuana Dissenters Abound, But – Smog Can’t Find Champion,” *Independent* (Pasadena), February 9, 1967.

Francisco hippie community are moving elsewhere,” a hippie newsletter lamented.²⁵⁷ Where would they go?

The answer, before it became a full-fledged movement in the 1970s, was back to the land.²⁵⁸ In contrast to people like Gilluly and the conservatives in Bozeman, hippies had a vision of what Jackson would call the “inhabited” landscape, a community without streets, tract housing, or a courthouse—a landscape built by people to live simply, and simply *live*.²⁵⁹ Certainly this kind of community could be established within the political landscape of the cities, but the vast, uninhabited tracts of land to be found throughout the American West offered them a greater degree of autonomy, if not complete sanctuary.

Seeds Across the Nation: Communes, *Cannabis*, and the Counterculture

Hippies looked for out-of-the-way places where they could establish communes and live out their own societal values apart from mainstream, official America.²⁶⁰ Eugene Bernofsky, who had sold marijuana to Allen Ginsberg, and a group of other artists founded the Drop City commune east of Trinidad, Colorado in 1965.²⁶¹ By 1967, Marc Weisberg had established a hippie colony about twenty-five miles east of Chico, California, in the Butte Creek Canyon. About a dozen hippies there killed their own game and grew *Cannabis*, until their sanctuary was raided by Butte County sheriff’s deputies in search of a “missing” girl.²⁶² Thirty miles west of Spokane, Washington, hippies grew marijuana on Huw Williams’ commune, Tolstoy Farm.²⁶³

²⁵⁷ Miller, *The 60s Communes*, 67-8; “Organized Crime Sets Sights on Haight-Ashbury,” *The Press-Courier* (Oxnard, Calif.), August 9, 1967.

²⁵⁸ Miller, *The 60s Communes*, 67-9.

²⁵⁹ Jackson, *Vernacular Landscape*, 40; Miller, *The 60s Communes*, 164-5.

²⁶⁰ Mark Matthews, *Droppers: America’s First Hippie Commune* (Norman: University of Oklahoma Press, 2010), 184-5.

²⁶¹ Matthews, *Droppers*, 49; Miller, *The 60s Communes*, 33.

²⁶² “Missing Girl Found in Hippie Colony,” *Long Beach Press Telegram*, December 1, 1967.

²⁶³ Miller, *The 60s Communes*, 23-4.

Indeed, by the end of the 1960s, young counterculturalists had established thousands of communes across the country.²⁶⁴

In their infancy, before dozens of residents were packed in or while the founders built makeshift shelters, many of these communes were camps. Residents cut firewood, cleared sites for shelters or tents, dug fire pits, and planted gardens, creating landscapes that mirrored the first humans' contact with *Cannabis* and other camp-followers.²⁶⁵ Of course, the hippies didn't have to re-invent the weed; they brought *C. indica* seeds to the communes, and marijuana production was standard practice in these informally modified landscapes.²⁶⁶ As shown by the 1973 Humboldt County raid, growing *Cannabis* placed the whole settlement at risk, so not all communes did it.²⁶⁷

Not all hippies preferred pot, either; use of LSD and psychoactive mushrooms was also prevalent in many communes. While the government apparently saw marijuana as a cheaper version of heroin, the hippies recognized the difference. They considered pot and LSD to be “positive” and “mind-expanding” drugs, and called them “dope”; they viewed harder, more addictive substances like heroin, cocaine, and amphetamines as “socially counterproductive” and called them “drugs.”²⁶⁸ In order to strengthen their bonds as a community and unite their outlook, some communes held group LSD sessions.²⁶⁹ Similarly, *Cannabis* cultivation on some communes not only brought residents pleasure or much-needed cash—it also brought them together in a conscious act of outlaw agriculture. While it wasn't the only drug the counterculture embraced, the popularity and growth of marijuana on the communes and in many other places

²⁶⁴Ibid., xviii.

²⁶⁵Ibid., 193-4, 208-10.

²⁶⁶Ibid., 162.

²⁶⁷Ibid., 24, 162.

²⁶⁸Ibid., 206.

²⁶⁹Ibid., 180, 205-8.

led to the buildup of a unique horticultural knowledge throughout the sixties and early seventies.²⁷⁰

This knowledge was captured in some of America's first books on *Cannabis* growth. In 1970, writing with the pen name Alicia Bay Laurel, Californian hippie Alicia Kaufman published the handwritten *Living on the Earth*, the "virtual bible of rural commune and wilderness solo living."²⁷¹ Amid instructions for wild berry-picking and wilderness funerals, Kaufman included directions for "how to plant, nurture, cultivate, and cure" *C. indica*.²⁷² In 1974, former pot smuggler Thomas Forcade founded *High Times* magazine in New York City. Some four million Americans read Forcade's publication, which published articles on "gourmet ganja growers," black-market marijuana prices, and *Cannabis*-friendly celebrities.²⁷³ Meanwhile, pot enthusiasts and members of Denver's counterculture scene read *The Straight Creek Journal*. Alongside in-depth news stories on politics and social issues, the weekly underground newspaper ran many articles calling for *Cannabis* decriminalization, scientific studies on marijuana use, and other pot-related news and features.²⁷⁴ A year later, a pair of *Cannabis*-growing New Yorkers, Mel Frank and Ed Rosenthal, moved to California, where they published the *Marijuana Grower's Guide* in 1978.²⁷⁵

These early publications on *Cannabis* horticulture were the first sign that a *Cannabis* culture was crystallizing in America. Unlike the early Mexican-American growers or the middle-class poets of the Beat Generation, Americans no longer simply planted *C. indica* near a ditch or

²⁷⁰Ibid., 162, 205-7.

²⁷¹ Wally Lee, "The Lamplighter," *Eureka Times Standard*, April 3, 1971.

²⁷² Ibid.

²⁷³ Lee, *Smoke Signals*, 150-51.

²⁷⁴ Stephen Gascoyne, "Drive to Legalize Marijuana," *The Straight Creek Journal*, April 24-May 1, 1973; "New Pot Study," *The Straight Creek Journal*, April 24-May 1, 1973; "Bumper Crop this Year," *The Straight Creek Journal*, December 25-January 1, 1974; "Drought Affects More than Skiing," *The Straight Creek Journal*, November 10, 1977.

²⁷⁵ Rendon, *Super Charged*, 71-3.

on a vacant lot and hoped for the best; rather, these works show that by the 1970s the hippie generation had been seduced not only by the plant's psychoactive offerings, but also the natural processes that produced it—seasonal rhythms and light cycles, flowering, and the production of resin and seeds. Moreover, by publishing books and articles on these processes, marijuana growers packaged horticultural knowledge that had been informally gathered and built upon for decades and committed it to print. The USDA and University Extension services nationwide employed scientists who taught people how to grow tomatoes, corn, or turnips; in the 1970s, for the first time, there were people like Kaufman and Rosenthal who functioned as the *Cannabis* enthusiast's extension agents.

As Rosenthal and Frank's growing experiments in New York suggest, communes were far from the only site Americans grew *Cannabis indica* in the sixties and seventies. Aided and abetted in various places by climate, urban policy, topography, vegetation cover, and new literature on marijuana cultivation, *Cannabis* growers in the West tended their crops as part of a nationwide patchwork of unofficial landscape use. The legend of "Johnny Pot," a hippie who traveled the country sowing *Cannabis* seeds, was strong in 1968: "Johnny Pot was given his nickname by an agent who has chased him from the timberlands of Washington and Oregon through Kansas and Idaho to Ohio." Unlike his namesake Johnny Appleseed, Johnny Pot's "task of planting is relatively easy ... Marijuana seeds ... need almost no cultivating, and will flourish any place weeds grow."²⁷⁶ Since they found it worthwhile to pursue him across the country, federal agents apparently believed Johnny Pot was scattering free drugs all over America. He may not have been that effective. If Johnny Pot was indeed sowing drug *Cannabis* across remote places, then the plants would need to be found and harvested in their first generation; without human cultivation, *C. indica*'s drug content rapidly begins to ebb, as the plant's non-human

²⁷⁶ "Johnny Pot Sows Marijuana," *Eureka Times Standard*, October 21, 1968.

environment forces it to put energy into natural defense mechanisms like terpenoids instead of the psychedelic THC.²⁷⁷

But most growers in the American West stayed close to their crops, and they had an advantage over growers in the East, South, or Midwest: the West was more sparsely populated, with large tracts of rugged wilderness into which growers and their plants could disappear. In places like California, they also had the advantage of climate. In 1966 police in Portland, Oregon searched for the enterprising individuals who loaded 174 *C. indica* plants into tubs and placed them on two rafts in the Columbia River.²⁷⁸ A young couple from Idaho lost their 16-month-old daughter to foster care when they were caught growing 32 *C. indica* specimens in “a nursery or hot-house operation” on the banks of the Klamath River, about seventy miles northeast of Eureka, California.²⁷⁹ And in 1970, in Packwood, Washington, a tiny town in the heart of Mt. Rainier National Park, two young men grew a couple dozen *Cannabis* plants at their cabin.²⁸⁰

Not all remote environments in the West were suitable for growing good ganja, though. Captain Ray Howard of the Oregon State Police noted in 1969 that “[h]eavy rainfall and lack of sustained sunshine” in Oregon produced “an inferior hallucinatory effect.” This, however, did not stop people from trying; large crops of *C. indica* were reported that year, including a 3,000-plant field in the Cornelius Pass area, and a 687-plant greenhouse operation in Nyssa. Some patches, Howard said, were found after police “backtracked” people emerging from the forest with hoes.²⁸¹ In places farther north, like Billings, Montana, the colder climate forced *C. indica* to mature around six feet, whereas in hotter places like southern California, the heliotropic (sun-

²⁷⁷ Clarke and Merlin, *Evolution and Ethnobotany*, 51.

²⁷⁸ “Dope on River,” *Hayward Daily Review*, July 14, 1966.

²⁷⁹ “Couple Held For Growing Marijuana,” *Eureka Times Standard*, April 23, 1968.

²⁸⁰ “2 Youths Arrested,” *Centralia Daily Chronicle*, May 13, 1970.

²⁸¹ “Oregon ‘Horticulturists’ Grow Grass But It Just Doesn’t Work,” *Walla Walla Union Bulletin*, November 18, 1969.

loving) plants grew more than twelve feet high.²⁸² Undoubtedly the plants grown outdoors in Montana, like the ones in Oregon, produced inferior marijuana.

Some growers did not shun the political landscape but instead looked for un-patrolled or hidden areas within it. In 1966, Richard Evans Lyman, a 21-year-old musician, thought he had found such a place in Alamo, California because the “respectable neighborhood ... would not suspect anything” and “there was only one deputy in the area.”²⁸³ While Lyman was “partly right”—his next-door neighbor apparently mistook some of his 57 *C. indica* plants for tomato plants—an informant recognized the plants and brought in the sheriff’s deputies.²⁸⁴ In 1964, in a garden “along a sidewalk leading between two homes,” police in Billings, Montana found “among other shrubs” a few young *Cannabis* specimens.²⁸⁵

Clearly, these examples show that despite the desire of *Cannabis* growers to disappear into the rugged landscapes of the West, law enforcement sometimes caught up with them. Historians might argue this was for the best, since the only reason we know about these growers is because they were caught; we can likewise deduce from their stories that there were many others who stayed a step ahead of the law, like Johnny Pot or the anonymous Oregon growers who floated their crop on the Columbia. Their historical silence is the price they paid for avoiding detection. By establishing communes and illegal *Cannabis* plots outside the physical and ideological boundaries of laws and mainstream culture, American hippies and marijuana growers created their own “vernacular” landscape, a landscape of innovation and defiance.

²⁸² “Marijuana Crop Found in Billings,” *Billings Gazette*, June 16, 1964.

²⁸³ “Marijuana in Alamo Garden; Deputies Arrest Musician, 21,” *Oakland Tribune*, May 16, 1966.

²⁸⁴ *Ibid.*

²⁸⁵ “Marijuana Crop Found in Billings,” *Billings Gazette*, June 16, 1964.

Legal Warming

Not all of these growers faced the same kind of harsh penalties imposed on people like Samuel Caldwell or Leo Acosta. Anslinger had left his post at the Federal Bureau of Narcotics in 1962, right as marijuana was becoming popular among young, middle-class Americans. By the end of the 1960s, judges across the country were better informed about the drug and were better attuned to the social climate surrounding it; they were reluctant to enforce the harshest penalties, especially for first-time offenders.²⁸⁶ For example, although he was caught growing marijuana in his home, Richard Lyman was free after posting a sizable bond of \$2,750.²⁸⁷ That is no small amount, but if, like Sam Caldwell, he had gone before a federal judge in 1930s Colorado, Lyman wouldn't have been so lucky. In 1967, a judge in the Los Angeles juvenile department was fired for openly "favoring legal use of marijuana by adults," and telling a newspaper that the drug was "no more of a public danger" than alcohol.²⁸⁸

From the late sixties through the mid-seventies, anti-*Cannabis* laws were being contested in several states, and penalties were lessened in some. In 1967, friends of Melkon Melkonian, a school principal fired after one of his educators was arrested for selling marijuana, formed an impromptu group in San Francisco for the legalization of marijuana.²⁸⁹ A year later in Seattle, the American Civil Liberties Union began its challenge of Washington state's marijuana laws; in 1969, state lawmakers removed marijuana from stricter narcotics laws, changing the penalty for a first-time possession offense from a minimum of five years in prison to a fine and a maximum of six months in jail.²⁹⁰ In 1970, the year marijuana was classified under the new Controlled

²⁸⁶ Bonnie and Whitebread, *Marijuana Conviction*, 239.

²⁸⁷ "Marijuana in Alamo Garden; Deputies Arrest Musician, 21," *Oakland Tribune*, May 16, 1966.

²⁸⁸ "Judge moved for statements on marijuana," *Redlands Daily Facts*, October 5, 1967.

²⁸⁹ "Legalize marijuana group established," *Corona Daily Independent*, October 11, 1967.

²⁹⁰ "ACLU plans to challenge marijuana law," *Port Angeles Evening News*, February 16, 1968; "State Supreme Court Rules on Marijuana," *Centralia Daily Chronicle*, May 15, 1970.

Substances Act as a non-medical, extremely dangerous drug (Schedule I), a young lawyer named Keith Stroup founded the National Organization for the Reform of Marijuana Laws (NORML) in Washington, D.C.²⁹¹ In its first few years of operation, NORML cobbled together support from across the political spectrum—including Gordon Brownell, a Republican lawyer and defector from the Nixon Administration—to lobby for the decriminalization and legalization of marijuana.²⁹²

It wasn't until the mid-seventies, however, when these efforts began to pay off in more statehouses across the West. Oregon was the first state to decriminalize *Cannabis* possession in July 1973, limiting the penalty for possessing up to one ounce to a \$100 fine.²⁹³ Although a bill to legalize marijuana in Colorado failed in 1973, the legislature passed a bill in 1975 that brought punishment for possession of up to one ounce in line with Oregon's law.²⁹⁴ California passed a nearly identical law a month later.²⁹⁵ Those three joined Alaska and Maine as states that had decriminalized possession by July 1975.²⁹⁶

This is not to suggest that everybody arrested on marijuana-related charges during this time was treated fairly. Like it did for most other crimes, fair treatment in court often depended on the subject's race, class, or sex. In 1966, police in Santa Barbara, California searched Joseph Sanchez's apartment and found marijuana and heroin. Although the drugs belonged to Sanchez, officers also arrested Nancy Hernandez, his girlfriend and mother of their two-month-old daughter. Hernandez was not arrested for drug use, but "for being in a room where marijuana

²⁹¹Lee, *Smoke Signals*, 118, 128.

²⁹²Lee, *Smoke Signals*, 128-9.

²⁹³"ABA favors removing pot penalties," *Eureka Times Standard*, August 10, 1973.

²⁹⁴Richard Schneider, "Strang introduces legal marijuana bill," *Rocky Mountain News*, April 4, 1973; "Bill easing marijuana penalties sent to Lamm," *Rocky Mountain News*, June 20, 1975.

²⁹⁵"Marijuana measure signed by Brown," *Eureka Times Standard*, July 10, 1975.

²⁹⁶G.G. LaBelle, "Laws on marijuana are easing," *Billings Gazette*, July 17, 1975.

was smoked by others.”²⁹⁷ Facing up to six months in jail, the young Mexican American mother told investigators that Sanchez used drugs but she did not, that she was in the process of divorcing her first husband in order to marry Sanchez, and that she was receiving welfare for their child. Since Hernandez was a first-time offender, a probation officer recommended probation. But Hernandez’s association with a drug user, as well as her status as a mother on welfare, apparently irked municipal judge Frank Kearney—he would grant Hernandez probation only if she “agreed to be sterilized.”²⁹⁸

Hernandez had only a rudimentary education and didn’t want to go to jail, so she initially agreed. But after she spoke to a female physician about the sterilization surgery, Hernandez changed her mind and refused to sign the probation order. Meanwhile, a superior court judge struck down the ruling and blasted Kearney’s decision, calling it “in excess of his judicial power.” When Hernandez’s case was publicized, thousands of people around the world, many of them Mexican American, sent her letters of support; judge Kearney also received letters of support, apparently for his efforts “to reduce the rising number of illegitimate children supported by the taxpayers.”²⁹⁹ Curiously, although a judge in Pasadena had two years ago “counseled” vasectomies for fathers of illegitimate children, Kearney did not ask Joseph Sanchez to get sterilized. Apparently, to Kearney and his supporters, not only did drug-using fathers not bear any responsibility for their illegitimate children, but the solution to that “problem” did not include expanding access to education, creating more or better-paying jobs, or improving access to affordable contraception—instead, taxpayer-supported offspring could be prevented by leveraging draconian eugenics laws against minority women.

²⁹⁷ Lloyd Shearer, “Should this Woman be Allowed to Have More Children?” *Oakland Tribune*, August 7, 1966.

²⁹⁸ *Ibid.*

²⁹⁹ *Ibid.*

Kearney's main concern with Hernandez was her status as a welfare mother, not her association with a drug user; however, the only reason she was brought before the judge in the first place was because of a bizarre section in the California Health and Safety Code that made it illegal to be in the same room with a pot smoker.³⁰⁰ While many judges in the '60s and state lawmakers in the '70s reconsidered harsh punishments for *Cannabis* possession, Hernandez's story is a reminder that anti-*Cannabis* laws were still deeply entrenched in the legal framework of many states, and they could still be marshaled to racist and sexist ends.

Westerners in more conservative states resisted the push for reduced possession penalties. Although harsh anti-pot laws had their critics in Big Sky Country, Montana lawmakers shut down a bill to downgrade marijuana possession from a felony to a misdemeanor in 1971, and killed a similar bill in 1973 that would have legalized possession of up to 60 grams.³⁰¹ In 1973, the headline for a profile piece on Earl Wallace, chief of police in Lovell, Wyoming, warned readers, "Don't mention legal marijuana around him." Wallace's opinions on drugs and users came straight out of the 1930s; he maintained that *Cannabis* turned people into violent criminals, blamed the courts for lax sentencing in drug cases, and called for the execution of drug peddlers.³⁰² While many states in the West and across the nation did relax *Cannabis* possession penalties in the seventies, the lingering anti-*Cannabis* sentiment in Montana and Wyoming reminds us that not all western authorities were ready to admit defeat in the drug war.

Nevertheless, the strong counterculture presence on the West Coast and in Colorado throughout the sixties and seventies fostered a greater exposure, and thus a better understanding, of marijuana and pot culture among judges and lawmakers; they began to understand that the

³⁰⁰ Ibid.

³⁰¹ Jerry Holloron, "Committee Asks Lower Pot Penalty," *Billings Gazette*, February 23, 1973; Calvin Pruett, "Pot Laws Unrealistic," *Billings Gazette*, February 5, 1970; "Misdemeanor marijuana goes up in smoke," *Montana Standard*, February 27, 1971; "Pot possession bill introduced," *Billings Gazette*, January 27, 1973.

³⁰² Charlie Femling, "Don't mention legal marijuana to him," *Billings Gazette*, February 25, 1973.

nature of *Cannabis indica* made marijuana ubiquitous, and that sentencing scores of people to long jail terms because they smoked some plant parts just wasn't worth it.

“Justifiable”Wars

The counterculture was not the only group of Americans to take up marijuana smoking in the cultural shake-up of the sixties. Thousands of American troops in Vietnam, open to anything that would take their minds off the horrors of combat, rolled up and smoked Old-World strains of tropical *indica*.³⁰³ Statistics released by the U.S. Command in 1971 revealed that for ten months of the previous year, there were 9,253 drug violations by troops, and 7,065—more than seventy-five percent—were for marijuana.³⁰⁴

The fact that thousands of young American men were toking up in Vietnam was not lost on the federal government. In January 1971, six months before President Richard Nixon officially declared a “War on Drugs” stateside, the U.S. military officially added *Cannabis indica* to the list of enemy combatants in Southeast Asia. It wasn't the only plant on the list; in efforts to destroy the Viet Cong's natural cover and make vision and movement easier for their technologically superior forces, the U.S. military had since 1962 been dumping millions of gallons of Agent Orange and other chemical defoliants on large swathes of the Vietnamese jungle.³⁰⁵ In 1971, commanders were ordered “to conduct ground and air search operations to locate marijuana plants, and to ‘utilize their resources, equipment, and personnel in assisting the

³⁰³ “Marine war vet claims barbiturates, booze boost courage of U.S. troops,” *Corona Daily Independent*, June 15, 1966; Jack Anderson, “U.S. Army Facing ‘Hippie’ Revolution,” *Eureka Times Standard*, February 10, 1971.

³⁰⁴ “War on Drugs in U.S. Forces,” *Eureka Times Standard*, January 6, 1971.

³⁰⁵ Neal S. Oatsvall, “Trees Versus Lives: Reckoning Military Success and the Ecological Effects of Chemical Defoliation During the Vietnam War,” *Environment and History* 19 (2013), 427-458; James Scott notes that by complicating, constricting, and confusing the orderly movement of U.S. soldiers, the jungle literally blinded the American state, and so it tried to burn out a clear path to victory in Southeast Asia; see Scott, *Seeing Like A State*, 188-9; see also Edmund Russell, *War and Nature: Fighting Humans and Insects with Chemicals, from World War I to Silent Spring* (New York: Cambridge University Press, 2001).

South Vietnamese government in eradicating the unlawful growing of marijuana.”³⁰⁶ Although the orders stated that “under no circumstances” were U.S. forces to destroy the fields themselves, the Associated Press reported that “the burning of fields has been carried out in some areas for two years or more.” Destroying Vietnamese nature, the military believed, was the answer to both the Viet Cong’s guerilla tactics *and* the army’s drug problem.

Diplomacy did spare some Vietnamese *Cannabis*. The AP noted that burning *Cannabis* had strained relationships in the past with some South Vietnamese, including the Hoa-Hao religious sect, which grew *C. indica* as a cash crop.³⁰⁷ Indeed, in May a memo was sent to senior advisers of the Office of Public Safety, a group under the U.S. Agency for International Development that trained foreign police in drug enforcement, urging them not to disturb the Hoa-Hao *Cannabis* fields.³⁰⁸

Other fields were not so lucky. Between 1969 and 1974, U.S. forces helped destroy some 504,795 *C. indica* plants in Vietnam, largely by herbicidal chemicals that often missed their mark and damaged trees, crops, and animals.³⁰⁹ Although they were certainly concerned that drug use was affecting military performance, military leaders probably knew this directive was unenforceable—“If we had discharged everybody who smoked marijuana, we wouldn’t have had much of an Army left,” remembered one lieutenant general.³¹⁰ But with a tough-on-drugs president back home, and after years of veterans coming home with a new passion for pot or addicted to heroin, the military had to publically acknowledge the drug problem among U.S.

³⁰⁶ “War on Drugs in U.S. Forces...”

³⁰⁷ Ibid.

³⁰⁸ Jeremy Kuzmarov, *The Myth of the Addicted Army: Vietnam and the Modern War on Drugs* (Amherst: University of Massachusetts Press, 2009), 116, 127.

³⁰⁹ Ibid., 127.

³¹⁰ Ibid., 128.

forces and at least try to do something about it.³¹¹ Of course, just as Agent Orange did not stop the V.C. guerillas, campaigns against *Cannabis* growth did not stop active troops from smoking the herb, and many veterans brought home Vietnamese *Cannabis* seeds.

Veterans who had taken up pot-smoking in Vietnam left one guerilla war and came home to another—the U.S. drug war. The disturbing nature of the latter conflict is illustrated by the story of one veteran, Don Richardson of Humboldt County, California, and his small crop of imported *C. indica* on the Eel River in 1970. Richardson had brought some marijuana seeds home from Vietnam, and in the fall he planted them in a couple pots and hid his crop on a gravel bar in the Eel River near Waddington, California.³¹² When the plants were about four feet tall, a rancher following his cows near the river noticed them and contacted the Humboldt County sheriff's office. The rancher showed the plants to deputies Mel Ames and Larry Lema, and the two lawmen decided to stake out the spot and wait for the grower to return. On October 4, Lema manned the stakeout, hiding in the bushes near the gravel bar.³¹³

Also on October 4, Patrick John Berti, a 23-year-old college graduate and native of Ferndale, California, was helping his father, John, clean up debris from a wrecked store in Waddington. Patrick Berti and a friend, 22-year-old Jack McCanless, were hauling debris out to the Eel River gravel bar to be burned when they noticed the plants.³¹⁴ Berti, who had attended college in the sixties, undoubtedly knew about marijuana, and he and McCanless went over to inspect the plants. That's when Lema, figuring he had caught the two cultivating marijuana, stepped out of the bushes with his gun drawn, and informed the young men they were under

³¹¹ "Marine war vet claims barbiturates, booze boost courage of U.S. troops," *Corona Daily Independent*, June 15, 1966; Kuzmarov, *Myth of Addicted Army*, 125-6.

³¹² Andrew Genzoli, "Ferndale Confession! Resident Says He Grew Marijuana, DA Knew It," *Eureka Times Standard*, December 12, 1970.

³¹³ "Lema: Weed Looked Like Gun," *Eureka Times Standard*, October 22, 1970.

³¹⁴ "Berti's Killing Probed; Rites on Tomorrow," *Eureka Times Standard*, October 6, 1970.

arrest. Berti, who was crouched next to one of the plants, stood up and turned around. He had taken a small twig from the plant. Lema mistook it for a weapon and fired a single shot into his chest.³¹⁵

In a tragic twist, Lema and Berti knew one another, but it was only after Berti had uttered his last words—“Christ, Larry, you shot me!”—that Lema recognized him.³¹⁶ Lema and McCanless went to a nearby house and phoned an ambulance, but Berti died there, on the gravel bar, next to a pair of *Cannabis* plants that weren’t even his. Even if they had been, Lema’s actions certainly did not constitute a “justifiable homicide,” the verdict that capped a Grand Jury investigation weeks later.³¹⁷ Some in Berti’s community even blamed the young law school hopeful for his own death: if Berti was such a “good guy,” wrote Ferndale resident Jeanette Sousa in a letter to the editor of the *Eureka Times Standard*, “what was he doing out by this marijuana at the time of the shooting?” Sousa went on to criticize the paper’s coverage of the incident, saying, “You have made a good guy out of one breaking the law and a killer out of the one carrying it out.”³¹⁸ The letter was printed next to one by another resident who sympathized with Berti, but neither addressed the fundamental absurdity of the situation—did “carrying out” the law *really* require armed sheriff’s deputies to sit for weeks in the bushes, waiting to arrest someone for growing not two hundred plants, which could be turned into a profitable, illegal enterprise, but *two*?

If for nobody else but the Berti family, that one moment in 1970 showed that the decades-long fight against *Cannabis* in the United States had pushed the anti-drug agenda beyond the edges of sanity. In what rational legal system would a sheriff’s deputy approach two

³¹⁵ “Lema: Weed Looked Like Gun,” *Eureka Times Standard*, October 22, 1970.

³¹⁶ *Ibid.*

³¹⁷ “Lema House Bomb Threat Over Phone,” *Eureka Times Standard*, October 30, 1970.

³¹⁸ “Letters to The Editor,” *Eureka Times Standard*, November 4, 1970.

alleged *gardeners* with his gun drawn, blow one away because he could not tell a six-inch twig from a gun—a shaky excuse from a trained law officer—and then have his actions called “justifiable” by a court? A good guess might be a system that, some forty years before, unnecessarily demonized a particular plant and criminalized the people who used it. The buildup of a skewed, calculated, and callous vision of drug users and drug-plant *nature*, espoused by the majority of the nation, is why officers like Lema approached marijuana growers with such edginess; it is why Patrick Berti was killed in 1970.

For his part, Richardson admitted ownership of the plants later that year.³¹⁹ McCanless was tried for cultivation and possession of marijuana, but a jury found him innocent in March 1971.³²⁰ In light of Richardson’s confession, Berti’s attorney requested the case be reopened, and in November 1971—when their son would have been nearing the end of his first semester in law school—Berti’s parents settled with the county for an undisclosed sum.³²¹

Making the “Emerald Triangle”

Richardson probably grew *C. indica* in the Humboldt brush because he wanted his own personal supply, perhaps to self-medicate for Post-Traumatic Stress Disorder.³²² Not only was he one of many Vietnam veterans who smoked marijuana, but he was also one of many northern Californians who forayed into growing *C. indica* around this time. Beginning in the late ‘60s and early ‘70s, a combination of economic and environmental factors created a hotbed of outdoor *Cannabis* cultivation in a rugged, tri-county area of northern California that would come to be known as the “Emerald Triangle.”³²³

³¹⁹Genzoli, “Ferndale Confession!” *Eureka Times Standard*, December 12, 1970.

³²⁰“Jury Out 10 Hours; McCanless Innocent,” *Eureka Times Standard*, March 23, 1971.

³²¹“‘Swept Under Carpet,’ Berti Lawyer Pushes Case,” *Eureka Times Standard*, February 11, 1971; “Suit is Dismissed,” *Eureka Times Standard*, November 19, 1971.

³²²Lee, *Smoke Signals*, 135-6, 286.

³²³*Ibid.*, 174.

The region's climate was warm enough for *C. indica* to be grown outdoors, but its main draw for growers was its landscape—a sparsely populated, rugged landscape, riddled with rocky crags, redwood stands, and streams. This was ideal terrain for cultivating illegal *Cannabis*. Beginning in the late 1960s, groups of hippies established communes—like the one raided in 1973—in this wilderness as part of the back-to-the-land movement.³²⁴

Meanwhile, the decline of the region's fishing and logging industries by the 1970s left Humboldt, Trinity, and Mendocino counties rather poor.³²⁵ After the 1973 raid on the homesteads west of Garberville, the *Eureka Times Standard* interviewed one of the growers there, a 31-year-old college graduate identified as John. The airplanes buzzing above his head “for three weeks” convinced John to harvest his crop a week earlier than he wanted to—the plants hadn't flowered yet. He also told the *Standard* that northern California could use the revenue that a legal marijuana industry would bring. Citing the region's poor soil and short supply of water, he noted it was “problem country for farming,” and lamented the recent destruction of a *C. indica* plot said to be worth \$15,000: “Seems to me this area could have used that money.”³²⁶

As the deputies' crop estimate suggests, there was indeed money to be made. But in the early 1970s, marijuana's profitability in northern California wasn't just due to greater demand stoked by the sixties counterculture, or to the region's warm, rugged environment—it was also due to a renaissance in *Cannabis* horticulture. By the early 1970s a handful of books written by hippies and botanists told readers how to grow *sinsemilla*, or seedless marijuana.³²⁷ Early

³²⁴Rendon, *Super Charged*, 13.

³²⁵ Arthur F. McEvoy, *The Fisherman's Problem: Ecology and Law in California Fisheries, 1850-1980* (Cambridge: Cambridge University Press, 1986), 208; Rendon, *Super Charged*, 68.

³²⁶ “Pot growers complain about deputies' raid,” *Eureka Times Standard*, August 28, 1973.

³²⁷ Lee, *Smoke Signals*, 175-6; Rendon, *Super Charged*, 70-4.

outdoor growers in the U.S., perhaps on some of the hippie communes, probably figured this strategy out by experimentation, but the knowledge itself was not new.

Hundreds of years ago, Indians cultivated fields of *ganja*—seedless marijuana—by painstakingly removing any male plants in their crops. This forced the female plants, in their desperation to catch pollen, to produce more and more flowers coated in sticky, psychoactive resin.³²⁸ It was by necessity a meticulous process, as one male plant could pollinate an entire field of females and compromise the potency of their marijuana. Indentured Indian laborers brought this cultivation technique to the Caribbean in the 1830s, and it became common practice in places like Jamaica.³²⁹ It undoubtedly made it to Mexico, where the final product was named *sinsemilla*, Spanish for “without seeds.” Though some Mexican immigrants may have brought the technique stateside, it apparently did not cross over into the American *Cannabis* culture that developed in the fifties. Thousands of miles from India, the Caribbean, and Mexico, through patience, experience, and careful observation, American growers in California revived this knowledge in the 1970s.³³⁰

But it wasn’t just knowledge of “sexing” the plants that contributed to the marijuana renaissance of the 1970s. Growers in California, like the ones in Oregon, noticed that many strains of Mexican or Thai *indica* did not flower reliably above the 30th parallel. Searching for a variety of *Cannabis* that would produce better marijuana in more temperate climates, hippies traveling in the Hindu Kush Mountains of Afghanistan brought back a broad-leaved, shorter-growing, and most importantly, *frost-resistant* type of *C. indica*.³³¹ This kind not only grew differently—it was far bushier and a darker shade of green than tropical *indica*—but its resin

³²⁸ Mills, *Cannabis Britannica*, 54.

³²⁹ Rubin and Comitas, *Ganja in Jamaica*, 15-16.

³³⁰ Rendon, *Super Charged*, 56.

³³¹ Lee, *Smoke Signals*, 176.

produced a different high as well: “a more sedative, dreamy, body-oriented buzz,” as Martin Lee described it.³³² In the U.S., some varieties of this Old-World *indica* flowered as far north as Alaska.³³³

Because of the low-key nature of *C. indica* cultivation and northern California’s geography, isolated pockets of marijuana growers received different kinds of seed and used different horticultural techniques; this meant that even after new varieties like Afghani were introduced, they did not necessarily start popping up everywhere. Nonetheless, West-Coast growers began experimenting: they crossed the new Afghani *indica* with tropical varieties from Mexico, Jamaica, Colombia, or Southeast Asia, selecting for a range of preferred features: different kinds of highs, shorter growth habits, or earlier maturation.³³⁴ These new kinds of seedless marijuana were more potent, and thus more valuable; by the early 1980s farmers could receive between \$1,400 and \$2,200 per pound.³³⁵

Thus, by the end of the 1970s, the “Emerald Triangle” had all the pieces necessary to become the nation’s first hotbed of home-grown *Cannabis*. Pot-smoking hippies had grown *Cannabis* there for at least a decade in a climate that was generally favorable; a rugged, sparsely populated landscape helped growers avoid detection; the revival of ancient horticultural techniques and the introduction of more resilient varieties contributed to the production of higher-quality, more profitable marijuana; and the collapse of other legitimate sectors of the regional economy made *Cannabis* production that much more enticing. Just as former California Governor Ronald Reagan declared in 1976 that “marijuana could very well be one of the most

³³² Ibid.

³³³ Ibid.

³³⁴ Ibid., 177; Rendon, *Super Charged*, 66-7, 74, 100.

³³⁵ Lee, *Smoke Signals*, 178.

dangerous threats to an entire generation of Americans,” the cultivation of *C. indica* was building up entire communities in the northern part of the state.³³⁶

A Scare and the Squeeze

As suggested by the raid in Humboldt County in 1973, local law enforcement had already begun to combat outdoor marijuana growth in northern California. Renewed federal enforcement was not far behind. By the late 1970s, the counterculture had won many cultural and even some legal victories for marijuana. But the movement’s popularity ebbed at the end of the decade—though marijuana use did not—and the stage was set for a strong backlash from conservatives and prohibitionists. President Nixon established the Drug Enforcement Agency in 1973, and in a few years it had some 10,000 agents operating worldwide.³³⁷ Around the same time, the Nixon Administration provided the Mexican government with helicopters to spray Mexican *Cannabis* fields with the herbicide paraquat.³³⁸ Even though a *Cannabis*-growing culture was developing in California during this period, most of the country’s marijuana still came from Mexico—one of the best strains was known as “Acapulco Gold.”³³⁹ In addition to inundating thousands of acres of Mexican land with the toxic chemical, the use of paraquat, which can cause pulmonary fibrosis if ingested, made many marijuana smokers in the U.S. nervous.

It turns out they had good reason to be. In 1978, Dr. David Smith, a physician at the Haight-Ashbury Free Clinic in San Francisco, treated three young men for “suspected paraquat toxicity.” A Palo Alto research firm confirmed that samples of the men’s marijuana stash were “contaminated with paraquat.”³⁴⁰ The same firm estimated that, of the 1,400 marijuana samples it

³³⁶“Six primary elections on tap Tuesday,” *Eureka Times Standard*, May 24, 1976; Lee, *Smoke Signals*, 178.

³³⁷Lee, *Smoke Signals*, 134.

³³⁸Rendon, *Super Charged*, 65.

³³⁹*Ibid.*, 100; Lee, *Smoke Signals*, 176; “Tucson becoming nation’s marijuana smuggling capital,” *Eureka Times Standard*, May 11, 1975.

³⁴⁰Robert Levering, “The story behind the paraquat scare,” *The Straight Creek Journal*, May 4, 1978.

analyzed, 23 percent contained the chemical. The U.S. government, which couldn't have cared less about the health of pot smokers, did not conduct studies on the health effects of smoking paraquat-infused marijuana until 1977.³⁴¹ *The Straight Creek Journal*, a weekly counterculture publication in Denver, gave its pot-smoking readers step-by-step instructions, vetted by the Palo Alto firm, to test their own stash for the chemical.³⁴²

The federal War on Drugs got another boost when Reagan won the presidency in 1980. First Lady Nancy Reagan launched a “Just-Say-No” campaign, and the president himself inaugurated the invasive practice of employee drug screenings by peeing in a cup himself in 1986.³⁴³ In 1984, in direct contradiction to the relaxed state laws passed throughout the West and other states in the 1970s, Reagan’s administration raised federal penalties for possession, cultivation, and sales, and granted police the right to seize the property of suspected drug dealers. As Martin Lee points out, “Accused rapists, murderers, and kidnappers—unlike marijuana suspects—did not have their assets confiscated without a trial.”³⁴⁴ Despite the Fourth Amendment’s protection from “unreasonable searches and seizures,” a Supreme Court decision the same year upheld these expanded privileges granted to law enforcement. Reagan also targeted *Cannabis* fields in both Mexico and in the Emerald Triangle; he continued spraying the former with chemicals in the early eighties and invaded the latter with U.S. troops in 1988—the first time in U.S. history when a president used the military against his own people.³⁴⁵

During the 1980s, the DEA gave Colorado authorities \$40,000 annually to pay for overtime and training for officers, as well as aerial surveillance on plots of *C. indica*. In 1985 authorities removed 15,375 plants “from Colorado farm fields, forests, hillsides, and river

³⁴¹ Ibid.

³⁴² Ibid.

³⁴³ Lee, *Smoke Signals*, 191.

³⁴⁴ Ibid., 160.

³⁴⁵ Pollan, *Botany of Desire*, 127; Lee, *Smoke Signals*, 159-60.

banks.”³⁴⁶ But, just as with all prior efforts, these campaigns did not make a meaningful dent in *C. indica* growth in Colorado; indeed, the agent in charge of the Denver office of the DEA “conceded that the business of growing pot has become more attractive since successful eradication programs have curtailed the supply and driven up prices.” The DEA also found its estimates of the amount of home-grown marijuana in the country to be far off the mark—it seized more of the drug in 1984 than was thought to exist as of 1981.³⁴⁷ Moreover, marijuana growers on the eastern side of Colorado’s Rocky Mountains continued to benefit from large-scale, irrigated agriculture. Sheriffs from agricultural areas reported that “marijuana growers prefer cornfields ... because corn requires plenty of water ... and corn’s 8- to 10-foot height camouflages the shorter pot plants.” Meanwhile, growers in the western part of the state, lacking the irrigated cornfields of the east, rigged up “water supplies from drainage culverts and small reservoirs.”³⁴⁸ When they subtly planted *Cannabis* in between neat rows of corn or redirected water from a state-sponsored reservoir, marijuana growers in 1980s Colorado tried to beat the law by blurring the lines between the official and unofficial landscape.³⁴⁹ Despite the best efforts of state and federal authorities, some fourteen years after the oft-stoned John Denver wrote his iconic ballad of the Rockies, there was still enough *C. indica* in Colorado to get anyone in the state “Rocky Mountain High.”³⁵⁰

But for many marijuana growers in the eighties, it wasn’t just about selling people drugs; it was about making a living in an era where conservative policies privileged corporate agribusiness and the cocaine addicts on Wall Street—policies that siphoned wealth from the rest

³⁴⁶ Deborah Frazier, “Pulling up pot plants pushes up price,” *Rocky Mountain News*, October 6, 1986.

³⁴⁷ *Ibid.*; Pollan, *Botany of Desire*, 133.

³⁴⁸ Frazier, “Pulling up pot plants,” *Rocky Mountain News*, October 6, 1986.

³⁴⁹ Jackson, *Discovering the Vernacular Landscape*, 39-40.

³⁵⁰ John Denver and Mike Taylor, “Rocky Mountain High,” *Rocky Mountain High*, 1972.

of the economy.³⁵¹ As Congress and the Reagan Administration increasingly favored farm policies that privileged large agribusiness producers, some farmers in the Midwest turned to planting *Cannabis*.³⁵² They were not alone. In northern California, aside from marijuana growth, “there were few other options for employment, and none that paid as well.”³⁵³ In Colorado, Dave Carter, communications director for the Rocky Mountain Farmers Union, noted that “there’s probably a couple farmers with some pot growing between the corn rows—any way to make some money these days.” Carter joked that the government should outlaw wheat, corn, and cattle: “Maybe that way, we could get a good price for them.”³⁵⁴

The Colorado government certainly cooperated with the Reagan Administration’s anti-*Cannabis* efforts, but not on the level of California in the early 1980s. In 1983, the administration of Governor George Deukmejian, who as Attorney General in 1980 invited the press to watch him take part in a marijuana bust in the Emerald Triangle, established a federally funded initiative called the Campaign Against Marijuana Planting (CAMP).³⁵⁵ Using not only police officers and helicopters, but also SWAT teams, ex-green berets, and the National Guard, CAMP raids timed to the *Cannabis* harvest invaded and confiscated millions of dollars’ worth of Americans’ private property. Again, the operation pulled up many plants—by the end of the decade it was destroying as many as 180,000 per year—but it did not stop Emerald Triangle residents from growing or making a killing on their crops. With prices pushed upward by prohibition, a grower “in a good year” could clear a quarter of a million dollars in profit.³⁵⁶

³⁵¹Lee, *Smoke Signals*, 179, 189.

³⁵²*Ibid.*, 180.

³⁵³Rendon, *Super Charged*, 68.

³⁵⁴Deborah Frazier, “Marijuana Colorado’s No. 2 cash crop, group says,” *Rocky Mountain News*, October 6, 1986.

³⁵⁵Rendon, *Super Charged*, 75; Lee, *Smoke Signals*, 178-9.

³⁵⁶Rendon, *Super Charged*, 79.

The Reagan Administration poured unprecedented resources into the drug war, and in the process it trampled on constitutional rights, destroyed many plants, and arrested many people. Yet the all-out strategy failed to achieve its primary goal: to reduce the growth, use, and traffic of marijuana within and outside the United States. Indeed, under increasing pressure from state and federal law enforcement, *Cannabis* most growers in the West fled to either the safety of the indoors or the vast, unenforceable stretches of U.S. public land.

The importance of this shift in behavior among marijuana growers in the 1980s cannot be overstated. Forcing marijuana growers indoors not only made it harder for federal and state authorities to enforce prohibition, but it also inspired the innovation necessary to turn American marijuana from Mexican and Vietnamese transplants to the polygenetic pride of the pot-puffing world. Unsurprisingly, one of the first reports of indoor *Cannabis* growth comes from California in 1957, when Salvadore Sorra, a student at Marin College, and his wife Maryle grew *C. indica* underneath a “sun lamp” on a small plot in his basement.³⁵⁷ Sorra’s method was certainly more secure than the most common strategy of his day—outdoor cultivation—but it was not until the 1980s that it became a necessity in the face of amped-up federal prohibition campaigns.

In the relative safety of their homes, Americans discovered that *Cannabis* was a lot more adaptive than they thought. Not only could it grow in basements under artificial light, but it could take just about as much light, water, nutrients, and even CO² that growers wanted to give it. The right combinations yielded indoor-adapted varieties of *C. indica* with bigger flowers and more potent resin.³⁵⁸ Breeders crossed tropical and temperate varieties of *C. indica*, and came up with new strains with new names, including Skunk #1, Northern Lights, Big Bud, and OG Kush—the

³⁵⁷ “Couple Raised Own Marijuana,” *Bakersfield Californian*, January 3, 1957.

³⁵⁸ Pollan, *Botany of Desire*, 133-4; Rendon, *Super Charged*, 80-1.

genetic bases of today's marijuana crops.³⁵⁹ American growers traveled to Amsterdam, where marijuana laws were notoriously lax—although the substance is not technically legal—and networked with growers from around the world at events like the *High Times*-sponsored *Cannabis Cup*.³⁶⁰ These early American breeders were concentrated in the Pacific Northwest, but when the drug war pushed most growers indoors in the 1980s, anyone in any climate could experiment with *C. indica* cultivation.

One such experiment was apparently underway sometime after 1982 in Fort Collins, Colorado. In 2006, Greg Smoak, history professor at Colorado State University, bought a home on the city's southwest side that was built in 1982. While searching for a bad cable splitter in Smoak's basement, a cable company tech made a startling discovery: there appeared to be a false wall in one of the closets. Smoak started pushing and pulling on the wall, which turned out to be a hidden door on hinges. It opened into a small room containing several electrical outlets and ceiling hooks, most likely for powering and hanging grow lights. Smoak noticed that "all the drywall seams were sealed on the inside with duct tape, probably to prevent odors from escaping." In the grow room, the cable techs found and replaced the bad splitter; Smoak used the space to store valuables while he was out of town until he sold the house in 2010.³⁶¹ As Jim Rendon notes, secret grow rooms like the one in Smoak's basement were not just quaint sanctuaries of outlaw horticulture in the 1980s—they were the backbone of the illegal marijuana trade.³⁶²

Growing indoors removed two key obstacles to high-quality marijuana growth: the once-a-year harvest and the removal of male plants to produce the coveted *sinsemilla*. Indoors,

³⁵⁹Pollan, *Botany of Desire*, 132.

³⁶⁰Rendon, *Super Charged*, 91-2.

³⁶¹Gregory E. Smoak, communication with author, April 30, 2014. Smoak is now on the faculty at the University of Utah.

³⁶²Rendon, *Super Charged*, 102-20.

growers fooled *C. indica* specimens into flowering by turning off their “suns”—the high-powered lamps—for twelve hours per day, mimicking the natural change in daylight hours outside. Although outdoor growers produce sizeable yields, greater control over their plants’ conditions allows indoor growers to harvest multiple crops year round. Outdoor-grown-marijuana also often lacks the specifically tailored aesthetics that higher-end customers prefer, and which indoor growers can deliver—clean-looking, rounded flowers, for example.³⁶³ As long as they don’t have any male plants and don’t shock the female plants into producing male parts, indoor growers also don’t have to deal with random fertilization; outdoors, where pollen from male *C. indica* plants floats on the wind, this threat looms larger.³⁶⁴ Breeders could also more carefully transfer pollen from one plant to another to produce hybrid strains.³⁶⁵

Indoor-grown marijuana, as it was developed in the 1980s, may be the favorite of customers, but it comes at a high cost to the environment. Large-scale indoor growing operations require enormous amounts of fossil fuel energy to power lighting and advanced climate control systems. Current estimates claim that as much as 3 percent of California’s energy goes to indoor marijuana cultivation each year.³⁶⁶ Even outdoor growth, if legalized, could prove environmentally degrading, as demand might require trading large swathes of the California forest for massive fields of *C. indica*.³⁶⁷

The shift to indoor marijuana growing in the 1980s represented a period of co-evolution of marijuana culture and *Cannabis indica* itself, a feat that was not without positive and negative consequences for both. Growers operating indoors, free from governmental persecution, endlessly hybridized different varieties and selected for certain traits, such as higher THC

³⁶³Ibid., 15.

³⁶⁴Pollan, *Botany of Desire*, 134-5.

³⁶⁵Rendon, *Super Charged*, 86.

³⁶⁶Ibid., 117-19.

³⁶⁷Rendon, *Super Charged*, 134.

content or a particular smell, taste, or effect. The results of this are some 2,000 different strains of *Cannabis indica* today. This human-engineered biodiversity was not the product of mainstream agricultural science, which since the 1940s had been focused on creating genetically engineered, chemically dependent monocrops. Rather, modern marijuana sprang out of an amalgam of traditional knowledge, which accumulated and traveled across multiple regions of the world, and U.S. innovation, as growers reacted to severe pressure from law enforcement in the 1980s American West.

Into the Forest

The crackdown of the Reagan Administration, and the Bush Administration after that, on foreign drug smuggling also led to another shift in *C. indica* cultivation. The Reagan Administration tripled the amount of money spent on preventing illegal drugs from entering the U.S.³⁶⁸ By the mid-1980s, this led some foreign-tied “drug trafficking organizations” (DTOs), as the Forest Service calls them, to start growing high-quality marijuana on U.S. public lands.³⁶⁹ These growers were not the hippies of the 1970s, and unlike Patrick Berti, they *were* armed and dangerous. For example, when officers raided the residence of Lynn Osburn, who grew marijuana in California’s Los Padres National Forest, they found an automatic AR-15 rifle.³⁷⁰ Indeed, California growers on federal lands in the late 1980s protected their crops with “trip-wired explosives, spear-like stakes and wired plants,” and some even lined their plants with razor blades.³⁷¹ Meanwhile, in Huerfano County, Colorado, growers on public lands posted armed guards, kept pit bulls, and hung fishing line with “hooks at eye level” near their crops.³⁷²

³⁶⁸ Lee, *Smoke Signals*, 159.

³⁶⁹ David L. Ferrell, “The Illegal Occupation of America’s National Forests By Drug Trafficking Organizations (DTOs),” *Powerpoint* presentation, U.S. Forest Service, 2012.

³⁷⁰ “Agents Seize Dope-Growing Suspect’s Land,” *L.A. Times*, September 22, 1988.

³⁷¹ Peter G. Chronis, “Pot farmers getting more violent,” *Denver Post*, August 22, 1988.

³⁷² *Ibid.*

Aside from these deadly obstacles, rangers, DEA agents, and other law enforcement personnel had the impossible task of patrolling some 193 million acres of National Forest land for pot crops.³⁷³ In 1988, despite doubling its number of *Cannabis* plants destroyed and upping drug-related arrests on its lands by 300 percent, the Forest Service noted its efforts had “not reduced *Cannabis* cultivation on U.S. public lands.”³⁷⁴ Federal eradication campaigns, as well-funded as they were under Reagan and Bush, simply could not keep up with illegal cultivation, which continues on U.S. public lands through the present.

Forest Service agent Daryl Rush, who handles all drug enforcement operations in California’s national forests, noted that when he started in the mid-1990s, marijuana patches were “few and far between” and had no more than two or three hundred plants. Very few growers lived with their plants in the woods. But now, he said, the number of plants in one patch routinely reaches into the thousands, and more growers are setting up on-site camps. Rush said most of these current growers are involved in smaller drug-trafficking organizations, but the Forest Service has not been able to link very many of them to larger cartels.

Living in the woods allows growers to constantly watch over their crop, and Rush notes that they have become extremely adept at hiding themselves in the forests, picking out unnatural sounds like footsteps, and hanging fishing wire around grow sites as an informal alarm system. “Those people who grow,” Rush said, “they know the woods better than we do.” Most, though, are not stringing up hooks on their fishing wire or using other booby traps anymore. But Rush said his main concern with illegal grow sites their effects on the local environmental. Many careless growers leave behind plastic bottles and other trash, and runoff from the rodenticides

³⁷³Ferrell, “The Illegal Occupation,” U.S. Forest Service, 2012.

³⁷⁴ Douglas Jehl, “Forest Service, Marijuana Growers Battle to Standoff,” *L.A. Times*, October 14, 1989.

that are commonly used to defend marijuana crops from small mammals can contaminate nearby water sources.³⁷⁵

Rush's experience shows that while current marijuana plots on public lands may no longer be rigged with dangerous traps, their more recent increases in size and in number of armed cultivators poses a significant threat to the local environment. Clearly, marijuana growth on public lands is as problematic today as it ever was, although Forest Service data did show a steady decline in the number of *C. indica* plants found between 2009 and 2012.³⁷⁶ Even though marijuana has been legalized in Colorado and Washington, two states with many large national forests and parks, illegal growth of *C. indica* on public lands will likely continue in some form until it becomes more profitable to grow it legally.

A Return to Roots:

Medical and Recreational *Cannabis* in the Modern American West

It took Americans nearly sixty years between 1915 and 1973 to re-discover the medical benefits of *Cannabis* use, and when legal medical marijuana came in many states some twenty-five years later, there was more than enough home-grown marijuana to go around. Since the mid-1970s, through informal networks of seed-swapping and teaching, as well as published books and articles, growers in the American West had combined new technology and cheap energy with seeds and traditional knowledge from around the world to produce the most potent, stunningly diverse array of *C. indica* cultivars on the planet. It was only a matter of time before American citizens, scientists, doctors, soldiers, and eventually some local and state governments, realized the herb's beneficial potential.

³⁷⁵ Daryl Rush, communication with author, November 27, 2013.

³⁷⁶ "Total Plant Counts on NFS Lands," data table provided to author, U.S. Forest Service, 2012.

While the West remained the hotbed of growth after the seventies, Americans gave *Cannabis* a biological and cultural kickstart. What most politicians of the time failed to realize is that from the 1970s onward, *Cannabis* transcended the counterculture—it developed an entirely new culture of its own, to go along with its new biology. It wasn't just Mexicans, young people, and hippies who smoked marijuana anymore; it was also elderly people sick of Big Pharma's side-effects, talented musicians writing not just jazz but rock, reggae, and hip-hop songs, disabled veterans coping with nightmares, star athletes, and the chronically ill.³⁷⁷ Many recreational smokers read publications like *High Times*; in Colorado, they eventually had their choice between *Westword*—a weekly countercultural paper that picked up the slack when the *Straight Creek Journal* shut down in 1981—and *Rooster* magazine. Many recreational users kept up with medical marijuana headlines and supported that movement, even if some only saw it as a step toward outright legalization.

By the 1990s, *Cannabis* was still illegal and heavily criminalized in most parts of the country, but the counterculture's mainstreaming of marijuana, and in some cases the government's dogged pursuit of proof it was harmful, led to breakthrough revelations about the drug plant's true nature.³⁷⁸ Official breakthroughs included the report by the Nixon Administration's Shafer Commission in 1972, a congressional survey of scientists, doctors, law enforcement, and citizens that found “[n]either the marijuana user nor the drug itself” to be a “danger to public safety” and recommended decriminalization; they also included Dr. Tod Mikuriya's *Marijuana: Medical Papers*, an anthology of reports published in 1973 that helped break the silence on *Cannabis*' medical potential, and the 1990 discovery of the endocannabinoid system in rats and humans by professor Allyn Howlett of the St. Louis University School of

³⁷⁷ For examples of pot-smoking athletes and elderly people, see Lee, *Smoke Signals*, 268-70, 339-40.

³⁷⁸ *Ibid.*, 214.

Medicine.³⁷⁹ President Jimmy Carter endorsed marijuana decriminalization in 1977, an official breakthrough if there ever was one.³⁸⁰

But Congress under Carter didn't deliver federal decriminalization, and the federal government did not follow the recommendations of its own studies and fund therapeutic *Cannabis* research—so many Americans began making breakthroughs on their own. College professor Robert Randall's discovery that smoking marijuana helped his glaucoma in 1973 led him to become the federal government's first legal medical marijuana patient in 1975. During the AIDS epidemic of the 1980s, many HIV-infected gays and lesbians found that marijuana gave them the munchies, and in doing so spared them from HIV-related weight loss and anorexia. Later, when he couldn't get funding from the government to study the effects of marijuana on AIDS patients, Dr. Donald Abrams conducted his own studies, which verified that *Cannabis* stimulated the appetite without weakening the immune system. They also found that marijuana helped treat pain induced by peripheral neuropathy, a debilitating condition that affects AIDS patients, cancer patients, and diabetics. Also in the 1980s, Al Byrne, a retired naval officer who was exposed to Agent Orange in Vietnam, found as he counseled Vietnam veterans in Appalachia that marijuana helped them sleep, drink less, and in some cases quit harder drugs. Mary Mathre, Byrne's wife and an addiction specialist who was trained as a navy nurse during Vietnam, also counseled Vietnam veterans and advocated for their access to *Cannabis*. A decade later, Mikuriya treated veterans of the Gulf War for PTSD and recommended that "*Cannabis* should be considered first in the treatment of post-traumatic stress disorder."³⁸¹

All of these important medical discoveries and re-discoveries happened under the noses of the tough-on-drugs presidencies of Nixon, Reagan, and Bush. Slowly but surely, the public

³⁷⁹Ibid., 209-10.

³⁸⁰Ferraiolo, "From Killer Weed to Popular Medicine," 161.

³⁸¹Ferraiolo, "From Killer Weed to Popular Medicine," 162; Lee, *Smoke Signals*, 121-4, 140-1, 227-30, 287-90.

was realizing not only that marijuana did not turn everyone into addicts or slackers, but that it was actually helpful in many ways—those natural CB receptors in our brains, and the natural substance many used to activate them, turned out to be useful after all.

By the mid-1990s, national polls showed strong support for medical marijuana. But other than a few who introduced medical marijuana bills at that time, state and federal lawmakers had not budged on anti-*Cannabis* laws for two decades. California Governor Pete Wilson vetoed a bill in 1994 that would have allowed physicians to prescribe *Cannabis*.³⁸² Twenty-four states allow voters to enact laws by popular vote via a ballot initiative. Frustrated with intransigent lawmakers, the medical movement in California took advantage of the opportunity to turn public opinion into political gain and campaigned hard in 1995 for Proposition 215, which would legalize medical marijuana in the Golden State. On November 5, 1996, the measure passed with 56 percent of the vote, including votes from liberals, conservatives, and independents.³⁸³

Between 1996 and 2000, seven other states—Alaska, Arizona, Colorado, Maine, Nevada, Oregon, and Washington—followed California’s lead and passed measures legalizing the use and distribution of medical marijuana. Cities like San Francisco, California, Denver, Colorado, Seattle, Washington, and Portland, Oregon were counterculture strongholds, and each of those states harbored plenty of *Cannabis* growers for a century.³⁸⁴ The state legislature in Hawaii, where high-quality strains of *pakalolo* (“crazy weed”) like Maui Wowie had been grown for decades, also approved medical *Cannabis* in 2000.³⁸⁵ Even reliably conservative Montana, which had its own interesting history with *C. indica*, legalized medical *Cannabis* in 2004.³⁸⁶ What,

³⁸²Ibid., 162-164.

³⁸³Lee, *Smoke Signals*, 246-7.

³⁸⁴“Seattle said center of drug activities in Northwest states,” *Walla Walla Union Bulletin*, August 18, 1969.

³⁸⁵Other states, like Vermont in 2004 and Rhode Island in 2006, also passed medical *Cannabis* laws through the legislature, see Ferraiolo, “From Killer Weed to Popular Medicine,” 172; Lee, *Smoke Signals*, 176.

³⁸⁶Ferraiolo, “From Killer Weed to Popular Medicine,” 147-8.

besides scientific evidence, made medical marijuana politically appealing? Drug policy historian Kathleen Ferraiolo has a good answer:

“In the 1990s, medical marijuana supporters successfully shifted the terms of debate from concerns about addiction, apathy, and listlessness to feelings of sympathy and compassion for normal Americans with chronic pain for whom the drug offered relief from suffering.”³⁸⁷

Although polls showed poor support for recreational *Cannabis* in California in 1996, the template for outright legalization had been set: reframe the argument.³⁸⁸ Mason Tvert, director of communications for the Marijuana Policy Project in Denver, and others who worked to legalize recreational *Cannabis* in Colorado did exactly that. They called their efforts the “Campaign to Regulate Marijuana Like Alcohol.” On November 6, 2012, Colorado voters legalized recreational *Cannabis* by approving a constitutional amendment; Washingtonians did the same via a ballot initiative.³⁸⁹

³⁸⁷Ibid., 167.

³⁸⁸Lee, *Smoke Signals*, 243.

³⁸⁹Sadie Gurman, “Coloradans say yes to recreational marijuana,” *Denver Post*, November 7, 2012.

Conclusion

Re-thinking the Human-*Cannabis* Relationship

Over the course of a century in the American West, the coevolution of culture and *Cannabis indica* produced many fans of a smelly Asian weed. When we consider all the reasons drug *Cannabis* has appealed to people in the past—pleasure, profit, creativity, relief of stress, chronic pain and ailments, sleep, spirituality, mental stimulation—we remember why we interact with plants in the first place: we have needs, and we turn to the natural world to fulfill them. Americans who planted *Cannabis* in the twentieth century were criminals only in the eyes of the state, an impressive crook in its own right. From the plant’s perspective, they certainly would have been heroes and deities. Thanks to the efforts and enthusiasm of early growers and breeders who popularized home-grown marijuana, today’s AIDS and cancer patients, as well as military veterans, have *Cannabis* available as an effective treatment option in many places.

Once a plant as weedy and useful as *Cannabis indica* was introduced into American culture, future prohibitionists never had a shot. They thought they were ridding the country of a menace, but for the most part all they were doing was buying into class-based and racialized folklore that convinced them to pull up a bunch of dandelions every year, only to see them come back the next. Some American politicians, like Harry Anslinger and Richard Nixon, realized this, but—in the typical American fashion—chose to play politics and manipulate public opinion for personal gain. Others, like Ronald Reagan, the man who sent in U.S. troops to raid American marijuana growers in California, were simply ideologues unaware of their own hypocrisy. At times, prohibitionists were guided by an understandable but often hyperbolic concern for public health and safety, personal political goals, rigid ideology, or a combination of all three. Seeing

through the simplistic lens of the modern state, they passed laws, spread lies, and pulled up plants.³⁹⁰ They burned up money and manpower and locked away and disrupted lives, but just like booze, *Cannabis indica* didn't go away.

These decisions had worse side effects than *Cannabis*. Scores of Americans, a disproportionate number of them black or Hispanic minorities, were thrown behind bars. Since the 1980s, many *Cannabis* growers have had their property seized. Some Americans, like Leo Acosta and Nancy Hernandez, were wrongfully imprisoned. Others, like Patrick Berti, were unjustly killed. Millions more were fined, hassled, and stigmatized. Access to legal *Cannabis* could have helped more veterans with Post-Traumatic Stress Disorder and with abuse of more harmful drugs. Black markets remained open, and now powerful and violent foreign cartels vie for control of large sections of those markets. This is but a terse list of the consequences of *Cannabis* prohibition in the United States.

But the aggressive character that *Cannabis* prohibition took on, particularly in the last half of the twentieth century, led to its downfall. The American government was only the latest government to try to control *Cannabis indica*; like the others, it could not and did not, but that doesn't mean it didn't force the plant and its human stewards to adapt and innovate. When growers innovated by moving their crop indoors, by interbreeding different varieties of *C. indica*, and by sharing their knowledge in books and articles, they fed into a growing *Cannabis* culture. In the face of legislative intransigence, *Cannabis* activists in the West appealed to that culture, as well as to the nature of *Cannabis*—its medical properties and its relatively benign drug properties—in order to win the public opinion and votes that would throw off the yoke of prohibition. Familiarity with *Cannabis*, built up over a century in the West, had bred tolerance in

³⁹⁰ Scott, *Seeing like a State*.

many westerners. They understood that the feds were overreacting, and it didn't sit well with many of them.

By the time legalization movements began to succeed across the country, *Cannabis indica* had crossed many boundaries in the North American West. In the mid-nineteenth century, it landed on the continent with Indian laborers and Africans from the Caribbean islands. Then, it was taken out of its ancestral range, the tropics, and into the temperate latitudes of Mexico. It had crossed the Rio Grande into the United States by the early 1900s, and several decades later it crossed the cultural line between working-class Mexicans and middle-class American whites. The counterculture movements of the 1950s, '60s, and '70s further popularized the plant as one of its symbols; hippies brought new varieties of *C. indica* from Afghanistan, allowing the species to follow its human cultivators into the Pacific Northwest, Canada, and Alaska. The U.S. government, itself governed by Cold War fears and political posturing, responded to marijuana's growing popularity with an all-out assault that forced *C. indica* and its outlaw growers to retreat underneath artificial lights and behind closed doors, like the one in Smoak's old Colorado house.

American *Cannabis* growers also blurred boundaries when they made the vernacular landscape masquerade as the official. State-built ditch banks, cornfields reserved for state-sanctioned monocrops, and federal forests became sites of illegal *Cannabis* cultivation. Finally, by the early twenty-first century, *Cannabis indica* blurred the divide in many states between filthy drug and useful medicine. It is currently working on the boundary between useful medicine and all-around useful plant. Unsurprisingly, it's already having some success in the West.

Epilogue

On *Cannabis*, Drug Plants, and World Societies

Like so many projects, this one was inspired by a question raised in the midst of a wholly surprising event: the voter-approved legalization of recreational *Cannabis* in Colorado on November 6, 2012. It was the end of my first semester of graduate school at Colorado State, where Mark Fiege had recently introduced me to the ideas of environmental history. It was also my third month living in Colorado, and I had yet to understand how deep *Cannabis* roots ran here, or for that matter, how popular *Cannabis* culture had become in the state. The night of the elections I sat with my wife Nancy and a group of friends under the heated lamps of a rooftop bar in Fort Collins. At some point as we watched the election returns, a big-bodied young man who had been staring at his cell phone leaped from his barstool: “It passed! Amendment 64 passed!”

As I watched the man’s back-length dreadlocks tousle in elation, my emotions ran the gamut. The first one that hit me was surprise—because, maybe it’s just me, but legalizing a drug that has been banned for seventy-five years seemed like a radical shift in policy. Next came a hint of satisfaction, because laws I considered to be unjust were amended. Then incredulity set in, followed by confusion: “How did this happen? Why did this happen? Why here, and why now?” While I stood puzzling like the Grinch in the mountains above Whoville, the dread-headed man announced that he was now going to smoke a celebratory blunt in his car. We later found out that his father was a cop who supported legalization.

The questions that popped into my head that night sparked a year and a half of research, and probably many more, on the *Cannabis* plant and its human history. I have already offered

answers for at least some of those questions, and they will no doubt continue to send me back to the evidence in the future. But in the course of my research, something larger than *Cannabis* appeared—the entire story of drug plants, with its remarkable evolutionary twists, poetic dichotomies of tragedy and ecstasy, and the psychedelic spin it put on the human-plant relationship, struck me as one of the most fascinating stories in the history of evolutionary life.

Like the innumerable other plants that produce our food and medicines, plants such as *Cannabis*, poppies, tobacco, coffee, coca, tea, and khat sit precisely at the literal boundary between nature and human society—by “literal boundary,” I mean the human body, which both food and drug plants physically enter. As occupants of the literal boundary between humans and nature, drug plants actively contribute to our understanding of the human condition and experience; just like food, by sampling these substances and allowing them access to our bodies and minds, we can then embrace some as helpful, reject others as harmful, accept still others as both and try our best at mitigating their negative effects, and ultimately decide on their place in our respective societies. This is the rational approach to intoxicants that has been used for centuries in many places, but has fallen out of favor in the last hundred years, especially in the West. Studying drug substances as plants first gives me faith that this approach can be restored.

Unlike food plants, drug plants are not primarily sought for nutrients and vitamins essential to human life—substances that are to be processed, absorbed, and unnoticeably burned off, their non-useful parts efficiently jettisoned by the human body. What is sought in the drug plant is equally chemical but is often physically unnecessary: pleasurable intoxication. This altering of the mind, triggered by chemical reactions in the brain, can be as subtle as renewed focus on a book—caffeine—or as radical as a tour across a previously unimagined plane of existence, with extraterrestrials as guides—LSD or DMT. It all depends, of course, on which

drug plant is consumed, the user's individual chemical makeup, and various aspects of his or her environment.

The types of psychoactive plant material people consume may vary in effects, and by society, region, and over time. But *consumption* of intoxicating substances has never ceased. As Michael Pollan writes, the ability of a few fascinating plants to grant us new *mental* lenses through which to view the world (and beyond) has had a profound effect on *physical* human history.³⁹¹ For these lenses, these shifts in the perception of reality or in reality itself, have inevitably resulted in the production of new ideas; some of these ideas, because they come from a non-traditional perspective, may prove extremely valuable. In the past, these ideas took the forms of a high-flying jazz number or a moving piece of poetry or prose.

But ideas may not be the only benefit of a slight shift in the conscious experience; ethnobotanists Robert Clarke and Mark Merlin argue that “diminished aggression,” a well-known effect of drug *Cannabis*, “may have been of great advantage in surviving the confrontational social situations that humans have been increasingly exposed to during the evolution of contemporary societies,” and that the drug “in the long run may affect our personal growth beneficially and therefore enhance our chances of survival.”³⁹² It is no secret that entire religions have been founded and modified, entire societies re-ordered, and whole music genres inspired by thoughts and visions induced by psychoactive plant compounds.³⁹³ Reformers and activists from all eras, indignant toward what they see as stale or unjust elements of their societies, have turned to psychoactive substances to re-imagine human environments and relations—see the 1960s American counterculture. They have also used them to clearly define and articulate societal problems and their solutions—see the coffee dens of the Middle East, or

³⁹¹Pollan, *The Botany of Desire*, 141-45.

³⁹² Clarke and Merlin, 369-370.

³⁹³Pollan, *Botany of Desire*, 143-45; on the role of marijuana in 1920s jazz culture, see Lee, *Smoke Signals*, 43-48.

anti-colonial khat-chewing groups in 1950s Somalia. Drugs, particularly stimulants like caffeine, cathinone, or the coca leaf, have also been used practically to augment work and study.

Classically, and because many of these substances take their imbibers “away” from their existential stresses, drugs are often used by the destitute and downtrodden, as well as the laboring classes, of most world societies, an association that has led almost invariably to the criminalization of both plants and people.³⁹⁴ Indeed, even in their most subtle forms, the sensory experiences these substances produce are so different from our ordinary mental state that it has led many people to misunderstand, fear, and demonize these plants. While the label of an “evil” plant is assuredly a constructed one, there are indeed things about drugs that should inspire not necessarily fear, but cautious respect. Just as with natural disasters, nature, when presented with the right circumstances, will use its chemical bounty to destroy and enslave as well as inspire and relieve.

Where nature is quick to gratify our desires, it is also sometimes quick to exploit them in a devastatingly one-sided relationship known as substance addiction. The compounds in cocaine, opium, and tobacco—three substances proven to damage various vital organs and functions with prolonged use—can all produce a powerful physical dependency when naturalized into the body’s everyday regimen of chemicals.³⁹⁵ Physical addiction to these substances is not typical among first-time or occasional users—although the probability is certainly higher for heroin and crack-cocaine—but the longer a body is exposed to cocaine, morphine, or nicotine, the more the brain comes to accept, and then relentlessly *demand* their reintroduction. Addiction forces people to continually ingest veritable toxic substances, and leads to mental degradation or death in many cases. As drug policy critic Jacob Sullum points out, addicts represent a small but very visible

³⁹⁴Bradburd and Jankowiak, “Drugs, Desire, and European Economic Expansion,” Bradburd and Jankowiak, *Drugs, Labor, and Colonial Expansion* 3-29.

³⁹⁵ See Burns, *The Smoke of the Gods*; Merlin, *On the Trail of the Ancient Opium Poppy*; Spillane, *Cocaine*.

minority of drug users, and it is addiction and the awful physical effects of some substances that cause us to fear drugs.³⁹⁶ But with proper treatment, even heroin addicts can recover, and with more community investment in education, employment, and drug regulation, even blighted, left-for-dead crack neighborhoods can turn around. This is the side of drug legalization that many choose not to see, opting instead for the fiery, apocalyptic vision of drug-induced societal decay. In this simplistic understanding of the problem, use of any drug—except for the ones already legalized, of course—magically turns a person into addicts and criminals who would sell a 10-year-old into child slavery to get their next “fix.”

It is true that in a society that demonizes and criminalizes drug use, addicts are put in desperate situations and indeed do awful things to abate their sickness. But we are already witnessing the positive effects of common-sense drug politics. In 2001, after years of prohibition failed to head off an HIV epidemic propagated by the widespread use of dirty needles for injected drugs, Portugal decriminalized all illicit drugs.³⁹⁷ Under the new laws, people caught using have their drugs confiscated and are put before a health committee, whose primary goal is to persuade addicts to enter into free, state-sponsored rehabilitation facilities. These facilities are not prisons or mental wards that seek to sweep drug users under the societal rug, but actual clinics that focus on patients’ recovery and restoration to society. Compliance is enforced by various sanctions, none of which have the demonizing and brutal undertone of drug enforcement in the U.S. Most importantly, the teenage rate of drug use has decreased, and the rate of HIV infections has dropped markedly.³⁹⁸ Additional benefits of the Portuguese law include redirection of police resources away from drugs and toward other crimes, and a significant reduction in drug

³⁹⁶ Jacob Sullum, *Saying Yes: In Defense of Drug Use* (New York: Putnam, 2003), 10, 18, 22-23.

³⁹⁷ Caitlin E. Hughes and Alex Stevens, “What Can We Learn from the Portuguese Decriminalization of Illicit Drugs?” *British Journal of Criminology* 50 (July 2010), 999.

³⁹⁸ *Ibid.*, 1006, 1010, 1014.

use among prison populations.³⁹⁹ In December 2013, Uruguayan President José Mujica, spurred by his own acceptance of the drug war's failure and by supporters' desire to take the drug trade out of the hands of violent outlaws, pushed for and signed a bill that made the Latin American nation the first in the world to legalize *Cannabis*.⁴⁰⁰

Drug plants like *Cannabis* need to be studied because so many people still irrationally fear them, and this fear continually leads to decisions that create a great deal of human suffering. We are not willing to regulate these “evil” substances ourselves; nor are we willing to accept that people will always use them, or that arresting people for drug use solves nothing. Instead, we cede the trade in drugs to violent, opportunistic thugs, and then send in paramilitary police forces with guns blazing to fight them, turning our neighborhoods into hell holes. In these guerilla war zones, like Ciudad Juarez or Medellín or southcentral Los Angeles, teenagers are blown away on street corners, mothers and fathers are kidnapped and decapitated, and photojournalists take so many shots of bloody bodies that they are desensitized to the rampant death in their communities. These are problems that we can't begin to address if we don't get over our fear of certain drugs. Escalating the danger in these places is the exorbitant power states often grant to the police, who are allowed to violate the rights of citizens in order to “defend society” from drugs. When drug trafficking does not stop, or falls and then rises again, or when this approach does nothing but rip apart communities and mortify the citizenry, our solution is to *do the same thing again*. “And again!” our political leaders tell us, for apparently no price—not freedom, not constitutional rights, not lives—is too high for a planet of people so insanely dedicated to satiating an irrational fear. Political opponents of prohibition are labeled as drug-supporters, and are written off as “high” themselves. Maybe they are—but maybe that's why we should listen to

³⁹⁹ Ibid.

⁴⁰⁰ Simon Romero, “Uruguay Acts to Legalize Marijuana,” *New York Times*, December 10, 2013.

them, because whatever drugs they do in their spare time, they can't be more dangerous than fear, the ultimate mind-altering addictive drug. Indeed, no drug *except* fear could by itself produce the current drug-war dystopias we live in today.

When we begin to study and understand most drugs as *plants* first, this fear begins to subside. We remember that the coca leaf is a helpful, harmless stimulant; that the poppy is also a source of food and a symbol of remembrance; and that *Cannabis* has myriad benefits in addition to the mild and medicinal mental shift its drug form offers. We remember that cultivators of drug plants represent not mere criminals, but an extraordinary wealth of traditional horticultural knowledge that has helped people survive in hard economic times. This knowledge encourages some traditional agricultural practices, such as the saving of seeds and interbreeding of species to get desired traits, that should be reintroduced to the legitimate crop trade. In an age where profit motive has driven dominant, God-seed companies like Monsanto to engineer all of the biodiversity *out* of important, historically robust plants like soy and corn, drug plant-growers' original knowledge and agricultural methods—ironically *encouraged* by prohibition—are to be studied, and if possible, emulated.

And by studying the way these plants and the people who grew them have *shaped* our societies, we follow long stories of coevolution that expose the ancient and important relationships they've had with humans. Recognizing these plants' historical importance to humanity is an important step in re-making our planet's fearful and unproductive vision of drugs. It's a step toward the taking them out of the hands of dangerous professional criminals, and it's a step toward better seeing and providing for the poorer people in our societies.

Making sensible use of drug plants, however, is no easy task. Like the humans who use them, they are complicated organisms that produce a wide array of effects. Building a more

rational approach to drugs will take the combined vision of citizens, scholars, and politicians who are unafraid to see drugs for what they really are: as unique features of many useful plants, ones that have coevolved and shared with us some of the stranger nuances that make up the miraculous condition known as life on Earth.

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