Since 1990, many Cal Poly Humboldt faculty and students have made cannabis the focus of scholarship and learning. This work has been shaped by the political, economic, and cultural legacies of cannabis in Humboldt County. Scholarly interest spans multiple dimensions of cannabis cultivation, commerce, consumption, and related social issues. As a multidisciplinary team of scholars, Cal Poly Humboldt faculty affiliated with the Humboldt Institute for Interdisciplinary Marijuana Research (HIIMR) have also shaped the Bachelor of Arts in Cannabis Studies that will launch in Fall 2023. This is the first social science degree program in the United States with this orientation. In this article we trace the origins of cannabis scholarship and learning at Cal Poly Humboldt from a period of domestic cannabis prohibition to the recent period of industry legalization. We also provide an overview of the BA program links to local and state policy and other contexts. Finally, we discuss cultivation communities and strategies of resilience in the context of economic turmoil as a result of legalization.

**Keywords:** Humboldt, cannabis, communities, place, post-prohibition

Over the past half century, Humboldt County has been significantly shaped by, and identified with, its relationship with cannabis cultivation. Statewide legalization presents new opportunities for the County and its communities to leverage this legacy and address challenges. Cal Poly Humboldt is located within this historical epicenter of cannabis cultivation. The campus is well-positioned to study cannabis from a range of disciplinary perspectives, as well as create a bachelor’s degree for students to effectively address the challenges and opportunities that legalization presents.

In this article, we investigate entanglements of Humboldt County’s transition from a state of prohibition to a post-prohibition present (Corva and Meisel 2022). As a team of scholars affiliated with the Humboldt Institute for Interdisciplinary Marijuana Research (HIIMR), we draw on our individual experiences and cumulative research experiences to consider the conjunctural crisis (see Hall and Massey 2010) of cannabis in the county.

In the next section below, we trace the history of cannabis scholarship and education at Cal Poly Humboldt. Later, we discuss statewide eradication campaigns and subsequent legalization that threatens the place of cannabis in the County plan for sustainable economic development. Next, we review the origins of cannabis cultivation in Humboldt County. We then
describe research agendas examining cultivator organizing in the face of a market crash, as well as the transformation of cannabis communities by policy changes within and external to the County. In a subsequent section, we present a research agenda that compares Humboldt and Santa Barbara Counties’ navigation of post-prohibition, particular policy contexts, and related implications for economic viability of Humboldt legacy farmers. Dillis et al. (2021) identify Santa Barbara as the geographic center of California “non-traditional” large-scale cultivation enterprises. Finally, we describe cultivation communities and their development of strategies of resilience to promote economic development.

**Cal Poly Humboldt and Cannabis Studies Education and Research**

In this section, we discuss the development of Cal Poly Humboldt cannabis education, as the state, county, and university grappled with vexing legal, economic, regulatory, public health, and environmental issues associated with legalization. Since 2002, the Department of Sociology at Cal Poly Humboldt has offered a weekend workshop, “The Emerald Triangle.” Over the course of two days, students meet guest speakers representing cannabis farmers, public health agencies, city and county governments, land management agencies, and environmental organizations among other fields. Between 2011 and 2023, more than 700 students enrolled in the course. The curriculum provides an overview of social, economic, policy, and environmental dimensions of cannabis in the region. The course topics directly reflect emerging issues as the community navigated ambivalent relationships with the industry.

Between 2003 and 2019, 21 graduate students across academic programs completed cannabis-focused master’s theses. Student questions about cannabis were also raised across classes and during office hours. In 2010 a core group of faculty from Anthropology, Biology, Economics, Environmental Science, the Library, Psychology, Social Work, and Sociology began meeting as a “Marijuana Studies Working Group.” The group organized research presentations and attracted other faculty and students to participate. In 2012, the Chancellor approved their proposal to charter a research institute: “the Humboldt Institute for Interdisciplinary Marijuana Research (HIIMR).”

Josh Meisel (Sociology), our first author, and Erick Eschker (Economics) were the founding faculty co-directors until 2021 and 2019, respectively. Our second author, Dominic Corva (Cannabis Studies), is one of the current co-directors along with Whitney Ogle (School of Applied Health). Our third author, Ara Pachmayer (Recreation and Tourism), is a member of HIIMR. While the initial campus and CSU approval of HIIMR signaled important executive level recognition of the legitimacy of cannabis scholarship, substantial obstacles for research and teaching remained. The University retained prohibitions on research collaborations with the cannabis industry, as well as student internship and research placements with cannabis businesses. While there have been calls for eliminating such restrictions (Meisel, Watson, and Wesley 2019; Piomelli et al. 2019), these university prohibitions had a chilling effect on building the research capacity of HIIMR faculty and their students. In response, faculty sought to expand research partnerships within and external to the university. One way this was accomplished was by creating spaces where cannabis scholarship was shared with the broader campus community. In the first two years of HIIMR’s existence, the co-directors organized 12 well-attended public lectures on a range of cannabis related topics.1

University support for cannabis scholarship and education declined between 2014 and 2019. During this period there was less active communication from university administration in support of research opportunities or executive level presence at HIIMR sponsored events. The tide changed again in 2019 when a new university administration reached out to Meisel and Corva, then co-directors of HIIMR, seeking HIIMR leadership on the development of an academic degree in Cannabis Studies.

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1. A complete archive of these talks including video can be found here: https://humboldt-dspace.calstate.edu/handle/2148/1228
One year later the university was invited to submit a proposal to the Chancellor’s Office of the California State University to become a polytechnic university. It is noteworthy that the invitation from the Chancellor (Cal Poly Humboldt 2020) referenced the need for academic programs to address a host of pressing needs in California, including “north coast crops,” a veiled reference to cannabis cultivation. A new academic program in Cannabis Studies was included in the polytechnic proposal submitted in early 2021. The BA in Cannabis Studies was one of the first three new programs approved by the Chancellor’s Office in 2022. Cannabis Studies was presented as foundational to this Cal Poly transformation.

HIIMR co-directors Meisel and Corva led the academic program proposal process with substantial input from HIIMR-affiliated faculty members. In the process, they outlined six substantive new core courses with cannabis-centered content anchoring two concentrations for undergraduates: Environmental Stewardship and Equity and Social Justice. Restrictions imposed by the California State University Chancellor’s Office prevented curriculum from including any direct interaction with the plant or formal partnerships with any business that is directly involved in the cultivation, processing, transport, or distribution. Though these restrictions prevent teaching students some topics such as cultivation or manufacturing of products, faculty still had freedom to envision and design a curriculum unlike any of the trade-oriented programs that have emerged elsewhere nationally.

The BA in Cannabis Studies at Cal Poly Humboldt is an applied interdisciplinary critical studies program focused on developing graduates who can operate as historically informed stewards of cannabis legalization. From a critical perspective, cannabis legalization provides a material field for working on intersectional social problems through policy reforms in society, not simply a criminal justice reform in itself. Cannabis is a gateway subject for understanding and analyzing social problems. While legalization is a brand new tool for addressing such social issues, the broader context of prohibition remains an ongoing challenge.

As our students learn about the history, geography, culture, politics and botany of cannabis, they are prepared to steward legalization and other practices that mitigate cannabis-related problems, rather than reproduce them in new ways. Outside of Humboldt County, there are very few places in the world where this history is so evident in the very landscape, and woven into local activism and broader environmental social movements.

The study of cannabis is a vehicle for thinking about and practicing social change. The legacy of cannabis in Humboldt County makes it the ideal place to learn. To understand the origins of cannabis scholarship and learning at Cal Poly Humboldt requires an awareness of the history of cannabis prohibition—and legalization—in Humboldt County. This history highlights the ways in which the County was both insulated and exposed to the deindustrialization and economic decline common to rural landscapes across the world in the age of neoliberalization since the 1970s (Corva 2008).

As we continue to build the Cannabis Studies Program, we draw on a rich variety of methods for doing practical work on social problems. We depend on expertise across academic programs from hydrology and geospatial analysis to grant writing, investigative journalism, and beyond. Our students will have great flexibility in applying skills valued in many professions beyond those associated with cannabis policy, regulatory compliance, and socially conscious industry development. Ultimately, the study of Cannabis Studies at Cal Poly Humboldt prepares students to understand and address social problems broadly.

Cannabis and the Shaping of Humboldt County

The rise and fall of cannabis as an industry in Humboldt County in many ways mirrors the trajectory of other extractive commodity booms in the region (e.g., gold, whaling, fish, and timber) that sacrificed ecological sustainability and community stability for unsustainable economic growth fueling settler colonialism (Reed 2022). The industrialization of cannabis cultivation in the County, however, is not the primary reason why the county at large became culturally associated with cannabis cultivation, nor how the cultural economy of cannabis livelihoods worked for environmental and community sustainability rather than against it, for decades.
“Origin” stories centering cannabis and community formation in Southern Humboldt have been told many different times and ways throughout the decades. The story tellers were often the people who lived through it (Raphael 1985; Anderson 1990; Anders 1992; Holmquist 2010), thoughtful journalists like Emily Brady (2013), and more recently academics (Corva 2014; Kelly and Formosa 2022). Bosk (2000) provides a collection of personal interviews with back-to-landers that provides a glimpse of the communitarian values of the “new settlers” who first planted cannabis and/or became environmental activists in the county in the 1960s and 70s. A more complete account of this history can be gleaned from the 159 separate issues of “New Settler Interviews” published between 1985 and 2017. Raphael (1974, 1985, 1994, and 2022) provides extraordinary “everyday history” for linkages between the “old settler” colonial past of Humboldt County, starting with the Gold Rush, and the “new settlers” of the Bosk interviews.

In this article, we use the terms “new settler” and “back-to-the-lander” interchangeably and to emphasize three things. First, there is continuity of “settlerism” as a colonial process based on taking, owning, and exploiting land as private property (Reed 2022). Second, we make a cultural distinction between the “old settler” Humboldt families and the “new” ones establishing roots in the 1960s and 1970s. The latter generated terrains of cultural synthesis and contestation that continue to shape county communities today. This distinction is also between 1850s-style genocidal dispossession of the indigenous people and 1970s-style efforts to “inhabit a separate country” (Berg, ed. 1978) following principles of environmental stewardship. However, both old and new settlers have in common a more-than-proprietary love for the land and common struggle to stay here.

This section relies on those sources, as well as Corva’s 14-year history as a field researcher in the County. The first period of this work, between 2009 and 2012, focused directly on the back-to-the-landers. Corva explored the relationships between 1960s social movements and “mom and pop” cannabis markets. By 2010 these markets were a minoritarian but vocal element of Humboldt’s medical cannabis industry. The second period, between 2013 and 2016, found Corva in conversation with and then enlisted by elements of the Humboldt cannabis industry that organized county and state stakeholders in the lead-up to legalization. Corva served, for example, as the accompanying local academic expert for the Blue Ribbon Commission and the California State Board of Equalization tours of the Humboldt cannabis industry in 2014.

As noted, the story of the back to the land movement in Southern Humboldt includes how they accidentally found that cannabis could be a cash crop to sustain rural livelihoods and create community infrastructure. Cannabis producers provided in every remote watershed they settled both money and time to build enduring community institutions: schools, community centers, and volunteer fire departments. In the Garberville/Redway area that served as a peri urban center for most, they built a credit union, a rural health center, and the Mateel Community Center. The latter doubled as a center for social services, as well as an event and meeting venue for coordinating broad community development institutions and nonprofit fundraising events such as the Reggae on the River music festival. They formed enduring environmental nonprofits and wrote grant applications to professionalize them.

The new settlers did not build a singular community that identified itself as cannabis growers—certainly not in public. They built a network of institutions where community formation, defense, and resilience strategies could be worked out. And until 2010, they never organized under the banner of a singular cannabis industry. Even their community defense strategies against eradication revolved around avoiding arrests through early detection of incoming raid teams (the foundation of the local KMUD radio station’s original programming); and protecting their civil rights as citizens and county rights as landowners.

This logic of community formation based on communitarian and environmental stewardship never went away. It was the foundation upon which the county became culturally tolerant of cannabis cultivation. It was a livelihood that was not necessarily connected to industrial-scale greed and environmental destruction. That said, federally-funded eradication inflated the street price of cannabis and created a financial incentive for
people inside and outside of Humboldt County to cultivate cannabis for profit. Cannabis cultivation by a wide range of actors, including "old settler" families, new migrants escaping urban life, environmentally destructive opportunists, and criminal organizations domestic and foreign, spread throughout the county.

During the most intense period of federally funded eradication in Humboldt County (between 1985 and 1997, approximately), the development of cultivation techniques associated with industrial cannabis followed techniques for evading eradication. “Diesel dope” (cannabis grown indoors, off grid, and reliant on diesel powered generators) powered rural grows throughout the 1990s, as cultivators went indoors to escape helicopter detection. Cultivating on public lands mitigated the risk of planting on one’s own property once asset forfeiture laws were passed in the mid-1980s. The strategy of growing on remote public lands was taken up by organized (and disorganized) crime. By the end of the 1990s, these grow locations tangentially fueled a racialized moral panic about Mexican cartel growers, a subject that is beyond the scope of this paper.

Increasingly large-scale cultivation pushed further and further into remote, ecologically sensitive watersheds where clear-cutting and industrial pesticide use helped maximize yields (Butsic and Brenner 2016; Butsic, Schwab, Baumann, and Brenner 2017). And the more cultivation sites that popped up, large-scale and otherwise, the more water was diverted to grow cannabis rather than sustain sensitive species habitats (Bauer et al. 2015). In the decade following the 1996 passage of the medical cannabis initiative, Proposition 215, enforcement spread out across the state and focused increasingly on large-scale, environmentally destructive grows on public lands (Corva 2014).

While Proposition 215 created new strategies for growers to protect their crops from eradication and, increasingly, decriminalized medical cannabis dispensaries on the West Coast, the industrialization of the cannabis cash crop exploded. Two pull factors besides Proposition 215 are of special note. First, in 2002 the county elected a progressive District Attorney, Paul Gallegos. He brought close ties to the cannabis-supported environmental nonprofits and activism in the area. In 2003, Gallegos issued the “99 plant” guideline which allowed each medical cannabis patient, or their caregiver, to grow up to 99 plants in a 100 square feet of canopy, without being prosecuted. While formally about indoor medical cannabis grows, as it was attached to 100 square feet of canopy, the guideline came to assume a sort of informal regulatory power throughout the County. And second, the financial crisis of 2007-2008 attracted economic refugees into jurisdictions that already tolerated medical cannabis activity.

All of this accelerated the trend of a commodity boom that, under legal circumstances, would have played out in years rather than decades, into a supply glut. More and more people came to grow cannabis in Humboldt, and fewer people were punished for growing. The evolution of cannabis from a hippie cash crop to an industrial commodity boom also meant that it became a significant part of the county economy, valuable as a bulwark against rural poverty and stagnation. But because the value of cannabis derived from the price support program of prohibition, the boom times lasted for decades.

In 2010, with cannabis legalization on the horizon, fear of “what’s after pot” became a subject of popular anxiety for cultivation communities in Southern Humboldt (Brady 2013). At the same time, the boom was entering its zenith: margins fell but the volume and velocity of money it generated commanded an ever-increasing, if hard to measure, share of the county economy. Conservative estimates put the share at 25% of county GDP (Budwig 2013). The paradox of the moment is that it pushed cultivators, for the first time, to gain formal recognition from the County in order to create a sustainable, regulated economic future for an industry whose value was greatly inflated by prohibition. Unsustainable revenue and production figures were being used to project the size and significance of the industry, and to predict tax revenue to be collected from the industry; as well as to propose regulations that limited the viability and profitability of the legal industry.

The period between 2010 and 2016 accelerated structural tendencies towards extractive, large-scale cultivation, even as many supported the legalization of cannabis in order to reign it in. While small-scale, long-time communitarian and environmentalist grower com-
Cannabis, Communities, and Place

...munities struggled to reconcile economic livelihoods with the industrial character of what had grown around them, a new wave of commercially oriented market actors arrived in the county in advance of and/or to gain a foothold in legal cannabis production.

The 2014-2016 period saw unprecedented organization of cultivators as an industry (as opposed to civil defense groups, rural property owners, environmental activists, small business owners, and nonprofit communitarians funded by a cash crop). The new organization prepared the county for its present position: a place that remains central to the state's cannabis system, as measured by a number of comparative measures to be discussed in the next section. The effort to represent cannabis as a modern, industrial partner in the county's regulation of cannabis was catalyzed by an organization called California Cannabis Voice Humboldt (CCVH), created by two Bay Area lawyers and funded largely by commercial cannabis growers in the county, and at times in tension with small scale livelihood growers associated with the values and remaining people of the back to the land movement.

CCVH initiated the mobilization of industry capital into political capital for Humboldt County legalization, in the California legislature, for the state's Board of Equalization, and for then-Lt. Governor Gavin Newsom's Blue Ribbon Commission (BRC). The BRC informed the 2016 medical cannabis legislation, both the Medical Marijuana Regulation and Safety Act and the Medical Cannabis Regulation and Safety Act. CCVH convened an open forum of cultivators and county stakeholders to create the first draft of Humboldt County's first ever cannabis regulation ordinance. The Humboldt County Board of Supervisors revised the policy after considerable pressure emerged from environmentalist and small-scale cultivation voices concerned about the scale of industry to be permitted, as well as its lack of environmental review.

The first county ordinance regulating cannabis cultivation, referred to by county officials as “Ordinance 1.0,” drew upon local input, and subsequently that local input informed California's guidelines for structuring regulations. Of particular note is the BRC report's declared commitment to transitioning “responsible actors”; protecting public lands and sensitive watersheds; and protecting small and medium sized entities (SMEs) from large corporate interests (Newsom, Soltani, and Humphreys 2015). The last point is especially salient, since the 2017 Medicinal and Adult Use Cannabis Regulation and Safety Act launched with a five-year ban on large license types.

The initial ordinance created a window for transitioning existing cultivation sites by December 31, 2016, with a mandate to conduct an Environmental Impact Report (EIR) that could support a more comprehensive land use ordinance (termed Ordinance 2.0) to accommodate new permit applications. More than 2,200 applications were received, most of which failed to advance to state licensure within a few years, and the county went to work on an EIR to support a second, less rushed cultivation ordinance that could establish land use regulations for new cultivation sites on ecologically appropriate parcels (Ford 2020).

Based on the EIR, as well as the location of pre-2016 cultivation sites governed by Ordinance 1.0, the Planning Department capped by watershed the number of cultivation permits and canopy acreage. Ordinance 2.0 also established a temporary moratorium on permits in areas of Yurok Tribal Cultural Affiliation. Overall, 3,500 permits and 1,205 acres were distributed across the county. More than a third of the permits were planned for the Cape Mendocino and South Fork Eel watersheds where Southern Humboldt’s earliest cultivation communities settled.

Ordinance 2.0 also extended the period for 1.0 permits to come into compliance with state and local regulations. A 2020 “small cultivator” amendment established a streamlined permitting process for existing cultivation under 2,000 square feet on homesteads. Broadly speaking, the County's approach to the state's

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2. This account of CCVH—what it was, who drove it, where the fault lines were—is abbreviated for space. The story is much more complex and will be worth a separate historiographic intervention.

3. Canopy acreage refers to the cultivation square footage permitted by license type.
personal use cultivation and medical cultivation is more generous than anywhere else in the state. Beyond the licensed landscape, Humboldt maintains a relatively permissive approach to cultivation that allows its citizens to grow their own or as caregivers for patients with doctor’s recommendations.

Like every other jurisdiction in California, the permitting process has been slow and difficult to navigate. But by state comparison, Humboldt was much more prepared for and effective at getting permits through the process. It was aided by revenues from the county’s cultivation tax, Measure S, an initiative created by its cultivation communities and passed in 2016. Measure S funds allowed the Planning Department to double its budget and hire 50 new employees (Ford 2020).

Measure S also funded the county’s aggressive abatement program by allowing the Sheriff’s Department to hire two more deputies and paying for a satellite-based Humboldt Environmental Impact Reduction (HEIR) enforcement program, for which it received an award from the California State Association of Counties. This aggressive code enforcement program combined with punitive fines focused disproportionately on Southern Humboldt, relative to the rest of the county, with ambivalent results (Norris 2021). In 2020, it was lauded by the County Sheriff and the local licensed cannabis trade association, the Humboldt County Grower’s Alliance (HCGA), for substantially reducing unregulated cannabis cultivation in the county, and reducing negative community impacts and the county homicide rate (Greenson 2020).

The HEIR program also, however, created substantial collateral damage to people, mostly located in Southern Humboldt’s oldest cannabis cultivation watersheds, who were not large-scale, environmentally destructive, or even current cannabis cultivators, creating a public outcry in Southern Humboldt. A series of articles by investigative journalist Nichole Norris drew the attention of a national libertarian nonprofit, the Institute for Justice, which commenced a lawsuit against the county in Fall 2022 (Norris 2022).

The promise of cultivation taxes as a reliable source of county tax revenue were first diminished by another Southern Humboldt-based lawsuit completed in 2021 (Norris 2021), then by the increasing failure of licensed cultivators to pay their cultivation taxes on time due to lower than projected revenues, and finally through two actions by the County Board of Supervisors. In February of 2022 the Board retroactively reduced 2020 Measure S rates by 85% and then in November suspended the tax completely for 2021-2022 (Hutson 2022).

At the time of this writing, Humboldt County faced a radically different set of conditions for its cannabis cultivation communities than it did in 2010, when those communities first contemplated the challenge of surviving legalization. There developed a productive tension between legacy small-scale cultivators associated with environmental stewardship, and large-scale cultivators materially capable of stewarding policy formation as an industry. The tension materialized in a licensed landscape characterized by diversity of ownership and a predominance of cottage and specialty businesses reflecting more closely the original scale of mom-and-pop growers.

Humboldt and Santa Barbara Counties: Case Studies of Dispersed versus Narrow Production Control

This section describes Humboldt’s licensed cannabis landscape in relation to the state and by comparison with Santa Barbara County, the largest licensed cultivation jurisdiction in California. The data for this analysis were from the Department of Cannabis Control’s publicly available “Search Tool” database on October 30, 2022. There were 18 different state cultivation license types available through January 21, 2023. At that time “large” license types opened for application. This comparison focuses on the subset of cultivation license types available until January 2023: small, medium, specialty, and specialty cottage licenses.

While the 2017 state regulations capped at one the individual holding of medium license types, a loophole

allowed an individual to own unlimited non-medium license types (Dillis et. al. 2021). As a result, cultivation firms could “stack” smaller license types to produce far beyond the individually owned maximum canopy size intended by Proposition 64 that legalized recreational cannabis. This regulatory glitch bypassed California’s five-year moratorium on large license types defined as more than one acre in size. The ban on holding more than one medium license type remained intact.

While managing similar acreage, Humboldt County cannabis production control is dispersed across many more business owners compared to the narrowly controlled Santa Barbara market (Table 1). Many cultivation firms, including those in Humboldt, chose to stack small license types. One fifth of state producers are located in Humboldt with approximately 1.7 licenses per business owner. In contrast, Santa Barbara producers hold on average 26 licenses per business owner. As a result, Santa Barbara’s 1,875 licenses are held by 72 unique business owners (1.8% of the state total) permitted to grow up to a total of 437 acres of canopy. In comparison, Humboldt’s 1,485 licenses are held by 861 unique business owners (21.0% of the state total) permitted to grow up to a total of 413 acres of canopy.

About 50% of Santa Barbara County licenses (n=980) are owned by five individuals, compared with about 10% (n=83) of Humboldt licenses owned by the county’s top five license holders. Santa Barbara has one dominant license type, the stackable “small” one. Almost all (98%) of Santa Barbara’s cultivation licenses are small outdoor (full sun) (n=1,409) and Small Mixed Light Tier 1 (small low energy light deprivation) (n=425) cultivation types (Table 2). And the top five license holders in Santa Barbara have both more licenses and more cultivation canopy area than Humboldt’s largest license holders. Humboldt has a range of producer sizes within the county, but those producers are not very large grows in the state context.

There is a greater diversity of license types in Humboldt County (see Table 2) and more unique owners than in Santa Barbara, although the maximum canopy size at the time of this writing is almost equal (Table 1). Together Humboldt and Santa Barbara account for more than 30% of California’s maximum potential licensed canopy acreage. License ownership in Santa Barbara is consolidated amongst far fewer owners, reflecting a degree of license stacking into a few industrial mega-grows that reflect corporate and investor ownership rather than small- and medium-sized enterprises. Humboldt’s significance to state totals comes from its many producers with disproportionately less licensed canopy cultivated per owner. There is approximately a half-acre per owner in Humboldt compared to 6.1 acres in Santa Barbara.

The concentration of ownership and diversity of license type is what distinguishes Humboldt from Santa Barbara County. About 60 percent of California’s Medium Mixed Light Tier 1 licenses (low energy use light deprivation) are in Humboldt. Additionally, 1 in 4 of the state’s largest single license type, one-acre medium outdoor licenses (full sun), and 19% of the state’s medium sized, high energy, licenses (Specialty Cottage Mixed Light Tier 2), are located in Humboldt County. Humboldt also has a significant share of medium license types, which are the largest scale cultivation licenses that can be owned by any one business in California. It should be noted that all of these are outdoor medium license types.

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<th>Table 1. Comparison of Humboldt and Santa Barbara Licensed Cultivation</th>
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<td>Cultivation Canopy Acres</td>
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But Humboldt also has a disproportionate share of California’s extra-small (specialty) and extra-extra small (specialty cottage) license types. These license types represent the legacy of the early cannabis farmers insofar as they reflect smaller scale operations. In other words, Humboldt’s presence in legal cannabis can be understood in terms of both the number of owners, as well as the area of licensed canopy. Humboldt County growers hold about 25% of California specialty outdoor licenses, about 40% of specialty light deprivation licenses, and 32% of specialty high energy outdoor licenses (Table 2). Similarly, the county hosts about 35.6% of California specialty cottage light deprivation licenses and about 19% of specialty cottage high energy outdoor licenses. Its 12.7% share of specialty cottage outdoor licenses is in line with its overall license share.

The state license database as of October 30, 2022 reflected a snapshot of a regulated landscape that is both the outcome of a process that began as early as 2010, and a starting point for preserving the dream of legal cannabis as a significant economic industry in Humboldt County. That significance is financial, but it is also cultural. As an outcome, it reflects a local public policy trajectory aimed at constructing an industry commer-
cial enough to matter for local economic development (mediums and stacked smalls), but culturally distinct enough to capitalize on its legacy of livelihood grow-
ers (unstacked smalls and all smaller license types) that made it all possible in the first place.

**Cannabis and Humboldt County**

**Sustainable Economic Development**

Sustainable economic development calls for economic growth to work in tandem with sustaining and enhancing society and the natural environment for future generations. Economic development that embraces sustainability cannot ignore people and place. According to the U.S. Economic Development Administration, sustainable economic development should include the unique assets and strengths of a region (U.S. Economic Development Corporation, n.d.). In the case of Humboldt County, this includes cannabis.

Telling the stories of the people and places of Humboldt County is increasingly an important consideration for economic development in the county. Every five years the Humboldt County Economic Development Division, GoHumCo, develops a Comprehensive Economic Development Strategy (CEDS) “to attract federal funding and technical assistance” (Anon 2023). The most recent CEDS process focused on storytelling related to the economic drivers of Humboldt County and solicited feedback from communities and the public. This process resulted in a report that will inform the final CEDS document (Anon 2023). As an activity linked to the federal level where cannabis remains illicit, the final CEDS cannot reference cannabis explicitly. This federal constraint is problematic for planning as it limits discourse on cannabis and economic development. In the current document cannabis is referred to instead as “alternative agriculture” (Humboldt County Economic Development 2018:6).

Federal prohibition poses an objective challenge for cannabis industries in Humboldt County and in the United States in general. Until federal prohibition ends, or interstate trade agreements are enacted, a national legal cannabis market allowing for export beyond California is not possible. In the interim, opportunities exist for integrating the cannabis economy into Humboldt County. Prospectve directions for cannabis and sustainable economic development discussed below include normalizing cannabis tourism, reducing the stigma of cannabis, and strategic partnerships. Potential community and environmental impacts are also discussed.

While Colorado became the first state to offer recreational sales in 2014, legal cannabis tourism is a relatively new activity in the United States. Since 2014, multiple states have legalized recreational sales, and cannabis tourism has evolved. Taylor defined cannabis tourism “as purchasing with the intent to consume marijuana products while temporarily traveling away from one’s normal place of work or residence” (2019:6). Giraudo (2019) goes beyond consumption to include those interested in learning about cannabis but perhaps not consumption. Both ways of considering cannabis tourism provide opportunities for Humboldt County.

Despite being the epicenter of cannabis cultivation, cannabis tourism was slow to develop in Humboldt County largely due to regulations limiting farm visits or complex permits for tour providers. Currently, cannabis tourism in Humboldt County resembles an agritourism experience based on guided tours with visits to farms and/or nurseries to learn about cannabis and cultivation. Tours end in a visit to a dispensary to purchase cannabis, often from the farmers visited on the tour. There are multi-day all-inclusive tours, cannabis-themed events, or cannabis options at events being offered more frequently as regulations allow. Cannabis may also be combined with existing tourism resources in Humboldt County such as redwood forests, beaches, and other natural areas, as tourists find cannabis-friendly accommodations, and experience dispensaries, cannabis lounges, or events independently.

In addition to the potential of agritourism for Humboldt cannabis, showcasing best practices in cannabis cultivation for tourists, potential investors, and industry professionals is a possible area of growth and provides a model for others to see and learn about cannabis culture in the county. Huckleberry Hill Farms touts a Fish Friendly Farm designation and Full Cup Farm highlights their regenerative practices. By linking best
practices in cannabis cultivation with best practices at traditional farms, visitors are provided a comprehensive perspective of sustainable agriculture in Humboldt County that includes cannabis.

Legal cannabis tourism has the potential to spread development to other businesses as well. In 2021 there was an estimated $25 billion in legal cannabis sales in the United States. According to Forbes “as much as $4.5 billion was driven by tourists, who pour an additional $12.6 billion into restaurants, hotels, attractions and other shops—as well as into state and municipality tax coffers” (Yakowicz and Kelleher 2022). More locally, in a 2018 report on Humboldt County’s New Cannabis Landscape, tourism was noted as an important industry for cannabis (Claesgens and Kraft 2018). Claesgens and Kraft found that cannabis tourism would not only impact the demand for Humboldt cannabis but also “…for Humboldt-branded products and services” (2018:9), which would ultimately lead to job creation in the tourism sector.

Along with federal prohibition, overcoming the stigma of cannabis is a challenge for sustainable economic growth, whether the stigma originates with other residents (Kang and Lee 2018; Pachmayer, Switzer, and Reilly 2021), the government, businesses, or other tourists. Efforts to reduce the stigma of cannabis may be formal, such as New York state’s educational media campaign launched in advance of legal sales, or the Visit Modesto Cannapass program that focused on making “sure the community and users are all comfortable” (Kudialis 2021). Other efforts to reduce stigma may be more informal, such as in the context of tourism. And still other efforts elevate products and places through boutique branding and spa-like environments for consumption.

Looking to research from Canada where cannabis is federally legal, Dupej and Nepal (2021) investigated the role of tourism in normalizing cannabis. The authors found that by incorporating cannabis as another tourism resource, the tourism industry is facilitating the normalization of cannabis. “Tourism places cannabis into full public view, giving it greater visibility as a legitimate recreational resource” (Dupej and Nepal:367). Cannabis lounges introduce ways to consume in a safe environment, while cannabis tours to dispensaries offer a structure for people to learn how to purchase cannabis. Dupej and Nepal specifically address the messages provided by cannabis tour guides which challenge the deviant image of cannabis. Reviews of Humboldt Cannabis Tours highlight the educational factor of the tour and multiple reviews mention the tour guide role in dispelling myths about cannabis and Humboldt County. In the long term, focusing on destigmatizing cannabis coupled with fostering a legal path federally may allow the cannabis industry to grow. There will likely be continued prohibition at the federal level without education and work towards destigmatizing cannabis.

Strategic partnerships are important for a host of reasons, including the sharing of resources, knowledge transfer and innovation, as well as access to new markets or funding opportunities (Rainey et al. 2003). Strategic partnerships may also strengthen the cannabis industry. For example, there exist partnerships between cannabis and non-cannabis businesses for marketing purposes. These partnerships help integrate cannabis businesses into the traditional business world, providing exposure to non-profit organizations and educational institutions for creative funding partnerships, research, sponsorship, and advocacy opportunities. As noted in a marketing assessment, “collaboration between industry and government should be the foundation of Humboldt’s cannabis marketing program” (Gordon and Carver 2020:69). Based on their research of regionally branded products such as Colombian coffee and Napa Valley wine, the authors noted that industry and government collaboration was necessary for a marketing program that would successfully promote a regional product and promote the region itself. Industry stakeholders have knowledge and expertise while governments have policy and address industry related issues.

While sustainable economic development may result in an increase in job opportunities that can improve the standard of living of residents, there are other potential impacts on a community including environmental protection, enhanced community participation and solidarity, and improvement in the quality of life. As established above, there is a strong connection between the cannabis communities of Humboldt County and
the natural environment that encourages environmental stewardship. There are a variety of environmental impacts often attributed to illegal cannabis grows including water diversion violations, illegal road construction, discharge of sediment and pollutants to waterways or watersheds, or threats to native species (Bauer et al. 2015; Butsic and Brenner 2016). As the Department of Cannabis Control for the state of California operates with strict regulations regarding environmental impacts of cultivation, legal farms face regulations to ensure the negative impacts of their activity are reduced, ultimately protecting our shared natural resources.

As noted above, community participation is a critical part of the CEDS process. In soliciting feedback, GoHumCo notes:

We intentionally began this process by listening. To create an effective and inclusive economic development strategy, we need to know what community members are experiencing, their priorities, and their insights on the strengths and weaknesses of our county (We are Humboldt Rising, n.d.).

Rainey et al. (2003) considered the importance of equity in community participation and recommended that people “across all segments of the community” must be involved in the development process (2003:713). This sense of empowerment in promoting the success of a community enhances feelings of community solidarity and investment as evidenced by the lengthy history of community supporting organizations throughout the county. Strong community links also facilitate the formation of the types of partnerships noted above (Weinberg 2000).

At this time, the cannabis industry in Humboldt County is imperiled (Vanderheiden 2023). In better years, the tax revenue generated by the industry had the potential to improve the quality of life of all residents. Revenue flowed into community services, investments in infrastructure, healthcare, and other public goods (Rainey et al. 2003), as well as targeted investments and improvements in the cannabis industry. While the benefits of tax revenues from the cannabis industry are shared throughout the county, the cannabis industry is most directly responsible for and impacted by the work of many of the actions noted in this section.

Humboldt County at the Crossroads

The Humboldt County cannabis economy is at a crossroads. This represents the latest chapter in the political, cultural, and economic evolution of Humboldt County growers. Coupled with the high cost of entry into regulated markets—where those markets actually exist—there are multiple forces further constraining licensed and unlicensed cannabis as a significant component of the Humboldt County economy. The annual eradication program that began in 1983, California’s Campaign Against Marijuana Planting (CAMP) has been reinvigorated and rebranded as the Eradication and Prevention of Illicit Cannabis (EPIC) program. EPIC expanded from a seasonal to a continuous cannabis statewide interdiction program targeting unlicensed growers (Thompson 2022).

Additionally, a group of county residents successfully placed an initiative on the 2024 ballot to suspend cultivation licensing in the county (Burns 2022). The anger catalyzing initiative organizing mirrored that of neighborhood frustration with Arcata indoor cultivation of the prior decade. Collectively these developments signal a new chapter in the demonization of cannabis farmers in Humboldt County. These events suggest that the cannabis sector continues to face exceptional challenges to gaining legitimacy.

Whether cannabis remains an economically viable Humboldt County agricultural commodity may hinge on cultivator capacity to influence the cannabis policy dialogue in the years ahead. The market crisis has weakened the financial ability of cultivators to act politically based on strictly financial claims about market power and promises of significant tax revenue. Unlike other jurisdictions like Santa Barbara with concentrated market control, life in Humboldt is highly linked to broad cannabis ownership and a particular environmental and community building ethic from which the local industry evolved. This Humboldt cannabis story continues to shape critiques of the negative impacts of cannabis.
broad commercialization during later iterations of the Green Rush.

Every corner of Humboldt County has been touched by the long and mostly informally regulated cannabis boom. While the new settlers began growing for cultural reasons, the material windfall of cannabis as a cash crop carried the plant through an entire war on drugs and on to the other side of a formally regulated industry. Humboldt's insurgent cannabis communities “overgrew” the government. They held back the counterinsurgent forces of drug crop eradication administered globally by the United States. In the process, political strategy positioned marginalized communities as public enemies of a war for public health (Corva 2008). This narrative of cannabis cultivation as an anti-drug war social movement captures some but not all that made cannabis central to a rural capitalism industrial commodity boom.

Humboldt County’s challenge today is to rescue the past communitarian values in service of charting a path forward for sustainable, inclusive, economic development. Yet the cannabis industry cannot stand alone as the engine of economic development. Ancillary value chains beyond crops must be nurtured to create a sustainable future. This work also requires a diverse, sustainable, economic sector related to the legacy of cannabis in the county.

This sustainable pathway requires creating ways for people and small businesses to generate meaningful livelihoods out of other cannabis licenses and ancillary services: manufacturing, tourism, events, retail, breeding, product development, marketing and the like. It means supporting the capacity of farms to differentiate their products from those found in a mass commodity market. Medium and small farms cannot compete with large industrial-scaled farms. They have to provide a product of materially greater quality (a craft industry like micro-brewed beer) with niche cultivars. And they have to provide a product that can use collective marketing strategies to differentiate their products (like environmentally-friendly certification and wine appellations), with the knowledge that their customer base is a niche rather than mass market.

While many can and are doing this on their own or in specialized groups, the county can help by supporting, for example, education in regenerative agricultural methods such as those featured in second-generation Southern Humboldt filmmaker Clair Weissbluth’s documentary “Tending the Garden” (2022). Regenerative methods are marketable and reduce input costs over the long term, as they rely on locally developed inputs rather than mass-produced fertilizer products. This is a “craft beats scale” approach. Another resilience strategy underway within the county is happening through a nonprofit called the Cooperative Agriculture Network (Cory 2022), which involves forming cooperative arrangements to scale elements of business plans independent of production, such as distribution and marketing. The county’s local equity program has been supporting this effort by funding licensees to receive training in cooperative business strategies.

While the county collective marketing program seems to be defunded at this time, the Humboldt County Grower’s Alliance is proceeding on their own, based on the marketing assessment they wrote with a county contract (Gordon and Carver 2020). That assessment, in turn, was informed by collaborative expertise from The Organization for an International Geographical Indications Network (oriGIn), an NGO based in Geneva, Switzerland; and Origins Council (OC), a 501(c4) association of legacy producing jurisdictions in California. HCGA is now a member of OC, and as such helped found a national advocacy organization called the National Craft Cannabis Coalition. The group lobbies, among other things, for a national system of indicators of origin when federal policy changes. Independent of the county, its main trade association is strategizing to create appellations marketing frameworks that have served other industries, most famously wine, quite well. Eventually, when California figures out how to implement regional appellation certification, it will build on efforts currently underway in Humboldt and its OC partners.

Indirectly, the county can support its cultivation communities by finding industry-specific and broad-based ways for people and small businesses to be resilient in their livelihood strategies. For cultivation communities, this especially means policy flexibility to allow
licenses without losing them permanently, and opportunities to develop complementary income streams from other crops or even other jobs, perhaps in the restoration sector. Of course, Humboldt's communities beyond cannabis cultivation are also experiencing economic hardship. Broad-based workforce development plans that can help individuals, families, and small businesses in the county become resilient, regardless of their participation in cannabis, are absolutely necessary.

Ultimately, the value of cannabis to Humboldt County is not simply the economic value of its cultivation. Economically, the task at hand is to institutionalize the socially positive legacies of cannabis in the county into a heritage—a renewable cultural resource for differentiating Humboldt as a place that showed the world glimpses of how destructive, dominant social orders could be challenged and changed. As such, it is the place where the limits of legalization as an end to the drug war are especially evident. Humboldt's historical cannabis legacy is not over: it is just beginning to be written as a series of lessons to learn about how to be resilient in the face of destructive forces seemingly beyond our control—for now.

Cal Poly Humboldt: Research and Education in the Eye of the Storm

The launch of the Cannabis Studies major at Cal Poly Humboldt coincides with the moment when the statewide implementation of legalizing cannabis is facing strong headwinds from its enduring entanglements with prohibition. These include the retail bottleneck across the state; the expensive and complex regulatory environment; the broken promises of protecting small and medium sized enterprises; the emergence of not-in-my-backyard politics even in Humboldt County; and ongoing federal prohibition preventing legal access to national markets and limited access to banking. It is more apparent than ever that we need to study the ontology of legalization rather than assume it means a clear break from prohibition. Cal Poly Humboldt faculty and students remain physically and intellectually in a hub for studying and informing these changes. Despite the impacts of an industrialized prohibition economy, the legacies of communitarianism and environmental stewardship create unique threads in the Humboldt story of place and people. Our new polytechnic institution is growing a multidisciplinary intellectual community with strong ties to policy, practice, and change. These Cal Poly Humboldt faculty and students are well positioned to inform the national conversation that will shape the political, cultural, and economic landscapes of cannabis post prohibition.

References

Budwig, Jennifer. 2013. “Potential Economic Impact to Humboldt County if Marijuana is Legalized.”


