



# DINSMORE PETRUSESVKI: QUANTIFYING HISTORIC CANNABIS CULTIVATION

## ABSTRACT

This project uses an archaeological research design and survey techniques to identify definitive evidence of historic cannabis cultivation. The results of the survey and research have conclusively proved that cannabis was cultivated on the Dinsmore Petrushevski property for an extended period, using a variety of techniques that evolved with the growth of the industry in Humboldt County. 21,195 square feet of canopy was identified.

**Nick Angeloff, MA**

Archaeological Research and Supply  
Company

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## Introduction

This research project included a targeted survey of one parcel, 208-271-003, 40-acres. The survey was driven by a research design based in background research and utilized professional archaeological field methods, ethnographic interviews, and aerial photography to utilize three lines of potential evidence. The property was surveyed with the owner of the permit identifying areas which had been cultivated, indicating that the entirety of what was surveyed had been cultivated in 2015-2016 as the most intensive cultivation year and resulted in the identification of multiple historic cannabis growing sites, totaling **21,195 square feet** within the parcel boundaries. There is no reason to believe that the evidence of production was not utilized on an annual basis, continuously. It is clear the overall property has been used intensively for cannabis production and has utilized several different techniques to do so over the evolution of the industry in the county.

## Research Design

The research design for this project addresses a significant gap in the historic resources body of knowledge. The following breakdown of the history of the marijuana industry is compiled through multiple sources including the 'TIMELINE for Marijuana in Northwest California' compiled by Edie Butler for the Community Study of the Emerald Triangle Project, copyrighted by Guerra & McBane LLC 2015, Version December, 2015. The research design of this project is simply to document, at the project parcel level, both on the ground and through aerial/satellite photography, evidence of cultivation and the patterns which the cultivation follows within the historical context of the cannabis industry. The goal is to compile this research into a larger history of cannabis in Humboldt County that incorporates the archaeological evidence and compares this data with the known historic patterns developed through oral histories and various print documents.

## Research Orientation

Humboldt County and many of its cities have sequentially combated, de-criminalized, and recently regulated the agricultural production, processing and sales of Cannabis. The once underground market and now legal industry has not been documented from an historical perspective. The industry has both historic and contemporary significance to much of the country, particularly Humboldt County as the birthplace of the 'Emerald Triangle'. This research documents a small portion of a significant period in Humboldt County's economic history.

Archaeological literature is replete with examples of research focused on historic industries both in the built environment and within the depositional record. The field of historic archaeology, to a large degree is based in understanding the economic and social reality as interpreted through archaeological deposits and preserving the unique aspects of the built environment as related to significant people and places generally associated with dominant industrial drivers. To date there has not been a study related to Humboldt County's Cannabis industry, a world famous geographic location for the quality and quantity of product distributed, legally and illegally throughout the world. The fact that the best economic analyses have demonstrated that the underground Cannabis industry contributes 415 million dollars annually (conservatively) to Humboldt County's 1.6 billion dollar economy, roughly 26% (Jennifer Budwig, "Potential Economic Impact To Humboldt County If Marijuana Is Legalized," 2013, Budwig Thesis Pacific Coast Banking School graduate program University of Washington), indicates that the subject matter is worthy of historic research. The importance of understanding the history of industrial level economy in Humboldt from port and early agricultural economies to the logging industry and now the Cannabis industry through the archaeological context is well proven. The lack of archaeological research focused on the development of the Cannabis industry is a significant hole in regional, state and

national historic record.

## Background

### History

European ships were known to have traveled the waters of northern California as early as the 1600s. During these travels, explorers may have landed along the north coast of California, and would have almost undoubtedly contacted indigenous populations if they harbored in Humboldt or Trinidad Bay. Still, the first definitive contact is that of Hecata and Bodega in 1775. For nine days, they lay at anchor in Trinidad Bay, trading with the Yurok. Hecata noted that the Yurok were already in possession of iron knives, clearly indicating that this was not the first time the indigenous population had encountered and traded with Europeans (Coy 1929).

Though the frequency of travelers into north coastal California increased as time went on, it was not until the 1850s that large numbers of Euro Americans permanently settled in the area. In search of gold, thousands of settlers flooded the north coast of California. Despite finding much less than gold than the gold field of the Sierra Nevada foothills could yield, settlers stayed and quickly found other ways to make a living from the land.

Timber, fishing, dairy, and agriculture soon became the primary industries in Humboldt County. In the immediate vicinity of the project area, however, timber dominated. By the 1880s the larger, more profitable mills based out of Humboldt Bay to the south, including the project area, dominated the lumber markets.

Humboldt County had a short yet notorious history during prohibition, from 1920-1930 moonshiners found a safe-haven in the foggy green forests carving out their own life into the untouched and inaccessible character of the region. Smuggling alcohol back into the urban sprawl through rough north pacific seas was a risky but profitable venture for a couple decades.

The logging industry slowed during the depression but blossomed during the post war era with large scale industry driving the economy to the exclusion of other industries. However, after the summer of love in 1967 many counter culture figures migrated north from San Francisco into the hills and mountains of Humboldt. Disenfranchised with the war in Vietnam and the turbulence of the civil rights movement homesteads began to develop, which attracted people from all over the country seeking alternative lifestyles distant from the dramas of the world. Living from the land, shedding material possessions, and deepening their connection with the earth were some of main attributes to these newfound ideas being put into practice. The sheer distance of Humboldt from the chaos of society opened a large space for personal exploration which would lead to the dramatic transformation of a whole region (Humboldt Seed Organization 2014).

The Controlled Substances Act of 1970 classified marijuana along with heroin, methamphetamine, cocaine and LSD as a Schedule 1 drug. In 1975 the U.S. government started their major campaign against cannabis eradication. Mexico was the major producer and supplier to the United States and to reduce the influx, Mexican fields of cannabis were sprayed with a powerful chemical nerve toxin Paraquat (Humboldt Seed Organization 2014). It's difficult to pinpoint the exact moment when the technique for growing sinsemilla, or seedless pot, arrived in Humboldt County, but it was most likely in the mid 1970's (Butler 2015). Around the same time that marijuana growers in Humboldt and the neighboring counties of Trinity and Mendocino began producing sinsemilla, the U.S. and Mexican government began spraying paraquat on the Mexican marijuana crop, inadvertently creating a market for

Humboldt County growers. This eradication of Mexican interests caused a major increase in cannabis production in the Humboldt region as the continued isolation ensured the confidence of these newly developing growers. Many genetics began to flood in from all over the world brought by these “free spirited” travelers settling down behind the “redwood curtain” (Humboldt Seed Organization 2014). At the time, more than 90 percent of the marijuana smoked in the United States came from abroad (Daly 2014). Paraquat-laced pot posed serious health risks to consumers creating a sudden interest in other sources. By 1979 an estimated 35 percent of the marijuana smoked in California was homegrown, and rising (Daly 2014). California marijuana became synonymous around the state and nation with high quality. By 2010, an estimated 79 percent of all marijuana consumed in the United States came from California (Brady 2013). An industry was born in Humboldt County, bridging “the cultural divide between hippies and rednecks by providing income for all, and would bring a new economic boom to the area just as the old industries were drying up” (Brady 2013). People flocked to Humboldt County, marijuana was \$4,000 a pound, a family could get by on 20, 30, 40 pounds a year and be happy (Woody 2016).

This peace wouldn't remain for long as the 1980's were an incredibly difficult time for grower's. President Reagan started a major attack by instating minimum prison sentencing for trafficking and production of the plant.



*Figure 1 Local CAMP helicopter from a grower's perspective, from The New Yorker, Jackson Krulc 2014*

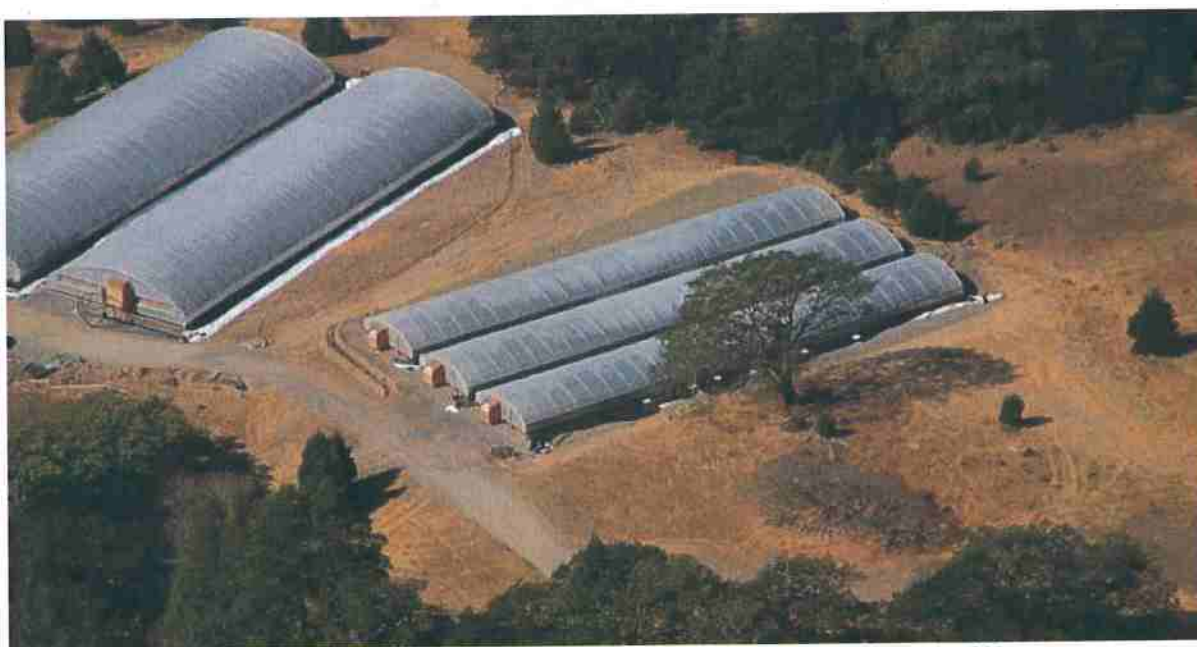
Reagan also funded the Campaign Against Marijuana Production (CAMP), a collaborative effort between federal, state and local authorities designed to eradicate the production of Marijuana within Humboldt County (Woody 2016). This time also marked the beginning of California's domination of domestic production, as quality began to rise through the emerging hybrid movement.

The 1990's brought on a new kind of change, one of resistance against the government. Many grower's lived on their own private land but retreated to the safety of state and national forests to cultivate. Reducing the risk of direct confrontation, many devoted guerrilla growers quietly worked in extreme environmental conditions far out of the reach of most authority's hands. Small portions of crops were eradicated but most of the region remained unscathed. In 1996, the Compassionate Use Act or proposition

215 was voted in by the people of California, forever shifting the Nation's view on cannabis. Some of the first doctors recommending cannabis were concentrated in Northern California including Humboldt County as many began to exercise their new-found rights. This controversial medical movement was met with force from the federal government, which contradicted the individual States' rights written into the constitution to protect the people. Many were prosecuted but the numbers continued to rise in medical marijuana recommendations and growers. Mom-and-pop backyard pot gardens got bigger after 1996. After spending decades trying to eradicate marijuana in Humboldt County, the state started treating the business as quasi-legal, at least if growers were supplying the medical marijuana market. People came out of the woods and started growing pot in greenhouses (Woody 2016).



*Figure 2 Large Scale Marijuana Production, from: North Coast Journal 2015*



*Figure 3 Large Scale Marijuana Production, from: Lost Coast Outpost September 2014*

The potential of the region was quickly realized, and production spiked substantially as Humboldt was

now become one of the most renowned places on earth for producing Cannabis.

By the year 2000, case history within the judicial system was changing. Larger amounts of people were succeeding in their defense of legal gardens in city, county and state courts alike. Confidence was reaching an all-time high and the liberal laws in Humboldt County stood out from the rest of the state. Respecting privacy laws and not prosecuting those actively cultivating gardens, Humboldt was becoming a safe-haven for cultivation.

This liberal approach to the law has pulled growers from all over the world to Humboldt to participate in this immense movement. A "green rush" hit Humboldt as outsiders, Bulgarians, Laotians, Texans, flooded into the county and set up industrial-scale marijuana farms (Woody 2016). Now with over 30,000 active greenhouses and tens of thousands of full sun gardens it is more than apparent that growth is in full effect (Humboldt Seed Organization 2014). This incredible growth hasn't come without its share of problems and federal intervention. In late of 2013 Humboldt County was declared by the federal government and the DEA as a "High Intensity Drug Trafficking Area" (Salon 2013). The environmental impact from these pot "gardens" is ravaging the redwood ecosystem that Humboldt environmentalists have spent decades fighting to save and restore (Woody 2016). "The single biggest threat to our environment right now has been unregulated cannabis," said Natalynne DeLapp, executive director of the Environmental Protection Information Center, a grassroots group that spearheaded the effort to protect the Headwaters and its wildlife (emphasis added). "In the last 20 years we've seen a massive exponential growth in cannabis production in the hills of Humboldt County and we've seen really devastating environmental effects" (Woody 2016).

Growers have fragmented forests by cutting trees to build greenhouses and roads on steep hillsides, choking creeks home to endangered salmon with sediment, fertilizers and pesticides and sucking streams dry during a record drought to irrigate marijuana crops. Once-still forests echo with the racket of hundreds of diesel generators. Rat poison and other toxic chemicals used by some growers to protect their plants are killing rare wildlife like the Pacific fisher.



Figure 4 Poisoned Fisher, from: North Coast Journal, August 1, 2013

After a radio-collared fisher was found dead in a remote forest in 2009, an autopsy revealed it had died from poisoning by a rodenticide commonly used on illegal grow sites. As the green rush brought more of these "trespass grows" into state and national forests and parks and onto private timberlands, the fisher death toll rose. In a 2012 study, Gabriel and his colleagues found that 79 percent of 58 fishers they examined had been exposed to rodenticides, four had died and a nursing female had passed the poison on to her offspring. By late 2015, the death rate from poisoning hit 18 percent of the radio-collared population (Woody 2016).



*Figure 5 Rodenticides at Marijuana Grow, from: North Coast Journal August 2013*

Gabriel estimates that only a fraction of trespass grow sites are detected. "There may be 10,000 to 20,000 sites that still need to be cleaned up," he said. "With the 300 to 500 grow sites law enforcement eradicates each year, you could just see the numbers just piling and piling up. What we worry about is that wildlife and their habitat are slowly drowning in these toxicants that will be in the environment for decades to come."

The California Ballot of 2016 legalized cannabis in California. With plans from locally produced and permitted marijuana gardens to tasting rooms and smoke lounges, ending a medical era and allowing marijuana tourism to flourish. This community is deeply rooted in the evolution of the cannabis industry.

The current research is driven by the recent regulatory efforts of Humboldt County resulting in an ordinance that gives preference to documented historic Cannabis grows during the permitting process. Dinsmore Petrusevki is an approximately 40-acre property with conclusive evidence of historic Cannabis cultivation and processing, representing Humboldt County's historic association with the plant during the 215 era. The grow sites are represented in the archaeological record as discrete areas of watering equipment and soils containers among a variety of other objects in association with the production of Cannabis.

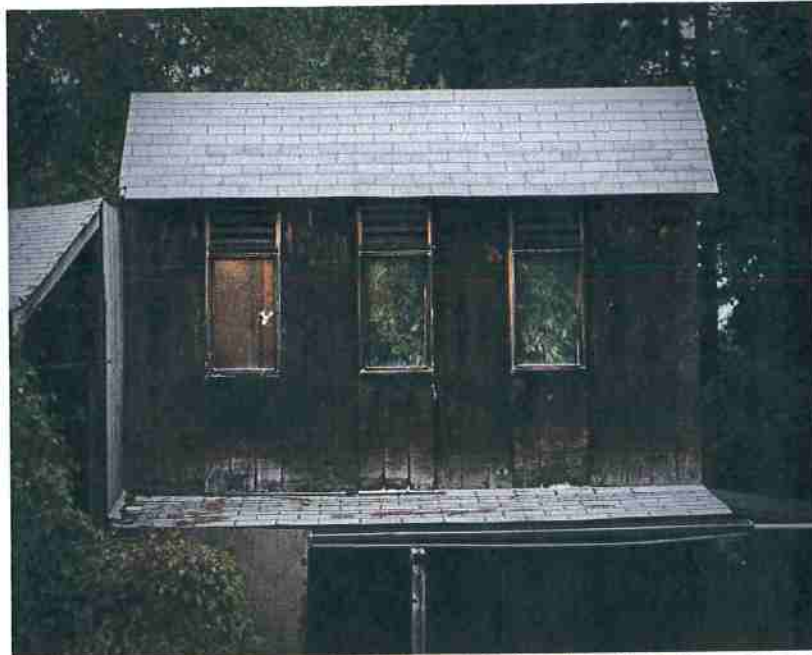
The above research has resulted in a division of the history of cannabis cultivation in Humboldt County into three era's:

1. Early period, or Counter Culture Era representing small scale and gradating into large scale rudimentary farming techniques with a relative lack of concern over law enforcement ramifications. These areas will be the most difficult to find as the early counter culture farmers tended to 'clean up after themselves' at the end of the season. The evidence of grows should be in open south facing areas with easy access to year-round water and represented by tilled field farming techniques. As the old hippies' recount, 'we used to grow fields, just like rows of corn'.



2. The CAMP era. This era began in the mid 1980's and runs into the mid 1990's. The exponential increase in law enforcement, the growers move to the fringe, prices skyrocket and grows become small but more numerous. A distributed economic model begins to develop to mitigate risk with single growers tending multiple locations, often creating 'sacrificial' grows in the open while locating high quality grows in difficult locations. It is expected that there will be an increase in the quantity of Cannabis grows in locations both on north and south facing aspects, located in fringe forest areas or forested areas with trees removed to open holes in the canopy.
3. The Prop 215 era. Post 1996 we see a real change in both the ethos of growers and the makeup of those growing and comprising the expanding industry. Early entrepreneurs saw a loophole in prop 215, no real regulations were adopted with the new law. Growers start aggregating 215 permits to develop large grows, again, and both outdoor and a new indoor grow industry develops. The industry has developed into a significant black market prior to the prop 215 era and now explodes with the confusion created among law enforcement by the aggregation of permits. CAMP and local authorities no longer know if a grow is legal or illegal from a helicopter. This created fertile ground for organized crime syndicates to invest in the industry. We expect these grows to range from a distributed model of the CAMP era to the open grow techniques of the early era but incorporating greenhouses as a technological advancement, and what can only be described as brazen open grows. We have described the first two expected deposit types above; specific artifacts should allow for temporally defining assemblages. The brazen grows will incorporate the use of heavy equipment, massive spring and water impoundments and a heavy prevalence of modern fertilizers and rodenticides. In addition, herbivore protection devices now not only include fencing but traps including nets, and traditional spring traps. The prop 215 era sites will be located throughout the property and indoor grows will be associated with the addition of generators, fuel bunkers, and either metal containers or wooden structures.

The known history of the industry in Humboldt County begins in the late 1960's with an alternative, 'Counter Culture Era' moving to the county to 'live off the land' with Cannabis cultivation being the only agriculture crop that could provide a decent standard of living. The industry began to develop into a larger scale black market economy during the 1980's when the children and grandchildren of the original 'farmers', and local large scale land owners who found it increasingly more difficult to operate their ranches with traditional income flows, decided the market was underdeveloped and production could be massively increased with relative ease. The significant increase and brazen disrespect for the law resulted in the Camp Era (Campaign Against Marijuana Production) beginning in the mid 1980's. The law enforcement efforts both drove the industry into a dispersed production model and led to the blossoming of the indoor grow.



*Figure 6 An indoor grow; photograph by the New Yorker's Jackson Krulc November 3, 2014*

Additionally, CAMP resulted in a massive price increase with the long-term grower appreciative that they no longer had to produce by the field but could now limit crops to small plots to make their fortunes. This fight between law enforcement and illicit growers continues today but peaked in the 1990's. In 1996, with the passage of California's proposition 215 the battle began to wane with growers using the new law to grow more volume both indoor and outdoor in greenhouses as producers of medical marijuana (Woody 2016). During the 21<sup>st</sup> century the Cannabis industry has exploded with law enforcement, and local populations seeing the entry of organized crime into the county setting up industrial scale operations with millions of dollars of investment and devastating impacts to the environment. The competition from these organizations has led the local producers to up their game as well. Now well-heeled with generations of wealth accumulated through the underground market, local industrialists followed suit, burying trailers and containers to hide indoor grows, leveling mountain tops, importing thousands of yards of high quality soil annually, drilling high volume wells and developing acre-feet of water storage to provide water for thirsty crops.

Each of these eras result in substantially different archaeological deposits, early farmers cleaned up after themselves leaving very little evidence, their children openly grew acres of crops with little fear from the localized law enforcement efforts (particularly when a bag of cash could cause an otherwise conservative land owner or law enforcement officer to look the other way, the next generation, the CAMP generation hid from the law, growing at the fringes of the canopy and turning to a new indoor production model to hide from the black helicopters. The passage of prop 215 allowed for large scale production with aggregation of growing permits resulting in large greenhouse grows, and as the value of the industry skyrocketed attracted industrial capitalists focused solely on increasing production and margins with little concern for the environment or of being impacted by law enforcement.

### Property Specific History

Each of the areas surveyed were associated with cultivation over the past three years and each area was cultivated or part of a cycle that occurred year on year. During the early 215 Era federally-funded

enforcement efforts tended to ignore California regulations which extended the cultivation patterns of the Camp Era on this property, and others. The continued grow patterns are identified in the project area as partially shade grown crops placed in various forested areas where small clearings allow for full and partial sun to reach the cultivation area. Confirmation of the extended pattern is highlighted with a transition from canopied or “gorilla” grow sites, to full sun growing on more level flats.

There was cultivation evidence on this property of Smart Pots (collapsible canvas bags), plastic pots, depressions in the ground, and trenches used for cultivation, but it is a reasonable expectation that other areas of the property harbor other forms of cultivation. The sites surveyed were subject of initial clean-up efforts, before it became clear that an on-site survey would be necessary to prove out pre-existing cultivation. While this project did document evidence of cultivation, the documentation reflects a percentage of actual annual operations, approximately 75% of the property was surveyed. Where Smart Pots, plastic pots, grow holes, grow trenches and clear evidence of use during previous years provided strong evidence of cultivation it is considered herein to be a location of cultivation. Whether those pots were moved during any one given season is irrelevant as the final location is what was documented as the location of operations. If during that season those pots moved around the property, those other locations would not be identifiable as a location of cultivation due to the lack of associated artifacts. Many of these pots were in clusters spread throughout the property near or on previous cultivation sites and are considered to retain an association with cultivation areas.

Given the current cultivator has only owned the property since 2016, the previous owner of the property was contacted in an effort to corroborate the in-field evidence of pre-existing grow. A call from Mr. Petrusesvki resulted in the drafting of the following email by Matt Allen, the previous property owner :

*I owned the parcel 208-271-003 from November 30, 2015 to April 8, 2016.  
During my ownership, I witnessed evidence of existing commercial cannabis activity in excess of 10,000 square feet. I submitted a Commercial Cannabis Activity Registration document (attached) on 12/14/2015.  
A 3 acre conversion (attached dated 3/1/2016) and a new water well (attached dated 1/21/2016).  
There was confusion on my part at the time the Commercial Cannabis Activity Registration document was filled out and submitted. It was not clear if I was claiming existing or proposing a "new" cultivation area. You can clearly see that I originally checked the "existing" and then crossed it out and reported "proposed", as I had plans to build out the new farm with the 3 acre conversion using the proposed new water well.  
Any questions or comments, please feel free to reach out to me.*

A second letter regarding the timing of a 3-acre conversion was submitted by Mr. Allen to clarify issues associated with the submission and implementation of the 3-acre conversion relative to changes to county regulations that have impacted this project:

Bear Creek  
Matt Allen <mattallenlandmark@gmail.com>

Wed, Nov 14, 12:47  
PM (19 hours ago)

to me

*The 3 acre conversion was initiated and submitted prior to January 1 2016.*

Matt Allen  
707 498 3063 cell

In the context of this project the definition of what is considered to be a cultivation area and site is provided for the record from Humboldt County CUMLUO section 55.4.7 "Definitions":

*"Cultivation Area" means the sum of the area(s) of cannabis cultivation as measured around the perimeter of each discrete area of cannabis cultivation on a single premises, as defined herein. Area of cannabis cultivation is the physical space where cannabis is grown and includes, but is not limited to, garden beds or plots, the exterior dimensions of hoop houses or greenhouses, and the total area of each of the pots and bags containing cannabis plants on the premises. The cultivation area shall include the maximum anticipated extent of all vegetative growth of cannabis plants to be grown on the premises.*

*"Cultivation site" means the location or a facility where medical cannabis is planted, grown, harvested, dried, cured, graded, or trimmed, or that does all or any combination of those activities, except where drying, curing, grading or trimming is otherwise prohibited.*

The results of this project are presented in this context as the area where cultivation occurred on a single premise and each site is a location where cannabis was planted, grown, and harvested. A very conservative approach was utilized, restricting the potential production areas to the subject parcel and tightening polygons to the greatest degree possible, omitting water lines between features and artifacts. It is the opinion of this research that the proposed project will result in significant environmental protection by consolidating the documented production of the parcel into a well-regulated facility.

## Field Methods:

Two surveys were conducted by Principal director, Nick Angeloff, MA, and four (4) qualified archaeologists from ARSC utilizing no more than 15 meter transects providing for 100% coverage of all accessible areas identified in an approximate 50% sample, including known locations of historic cannabis growing on the property in both forested canopy areas and on one (1) flat with partial sun exposure. The survey conducted on November 3<sup>rd</sup> by Principal archaeologist Nick Angeloff identified multiple areas of cultivation sites located under forested canopy. A second survey conducted by four (4) archaeologist on the following week of November 9<sup>th</sup>, further documented evidence of cultivation both within the forested areas and on a small flat. Additional information was also gathered through interviews of the current cultivator and the property owner electronically. Further background research of aerial imagery was used to corroborate field results and search for more evidence. This report accurately recounts the results of the background research and survey as guided by the research orientation. The research was objective in nature and any Cannabis related resources identified during field survey have been documented and included in this report as table 1 below.

## Results

The project proponent, Mr. Petrusesyki, indicated that he had initially directed and paid \$10,000 to remove garbage from the property, much of which was detritus from pre-existing cultivation but which also included over 100 tires. He also hired ten (10) workers in order to clean the property of pots and other associated trash from previous cultivations on the property. An estimated twenty plus (20+) truck-loads of cultivation debris and other garbage was removed from the property. Upon realizing the need for documentation of pre-existing cultivation required by the county, clean-up efforts halted immediately. This resulted in only a small portion of pots and other cultivation evidence remaining in their original location. In this light, a relatively liberal perspective was taken regarding provenance of growing incident location, stacked pots were included in tallies, assuming they were centralized in preparation for disposal. The remnant evidence of pots in place were clearly throughout the property and lacking in places that

were optimal for cultivation.

In this light, the evidence of cultivation on the property identified through this survey corroborated the claim that clean up had been started and halted as several of the concentrations of pots and other evidence had been consolidated at the edge of flats next to the road, ready for pick up by the dump truck.

Cultivation areas were located in the field and revealed multiple cultivation sites underneath the forested canopy and one (1) site located on a small flat with partial sun; research of aerial/satellite photos confirmed cultivation areas on point 459 with oral history from the client, field survey revealing a water tank bench, a dozen grow holes along the ridge with interview data stating that hundreds of pots had been removed during clean up efforts and the aerial photograph providing ephemeral evidence of cultivation along the margins of the opening in the canopy which has been mapped using a polygon method given the point data (pots) had been removed.

A second area was identified through client interview and aerial photography from 2015, waypoint 460, and documented as polygons in the area where a 3-acre conversion had been implemented. Two issues were addressed at this location, the 3-acre conversion was proved out to have been initiated and the application submitted in 2015 and the conversion completed by March of 2016 (see email from previous owner Matt Allen above), and this area had been the location of concentrated cultivation per the current owner and aerial photography who had clearly cleaned the area during the conversion process. The area to the west, north and southwest of the conversion did contain evidence of cultivation, although the aerial photos prior to the conversion are of low quality and cultivation occurred with canopied areas, there is no reason to disbelieve the project proponent and the previous owner that cultivation did not occur in this area as it is the best and easiest location to conduct operations. This being the case, a small polygon was created to represent a cultivation area although no in field evidence was located in this area due to the conversion activities.

The balance of the analysis used direct evidence of pots (both plastic and canvas), grow holes, and grow trenches identified in the field. These forested/canopied areas were spread out with cultivation evidence scattered throughout the property.





*Figure 7 June, 20 2015 Aerial photo with polygon areas circled*



*Figure 8 Small field area, note row crop lines and point data*



*Figure 9 3-acre conversion area, note concentrations of point data and row crops in upper right*



*Figure 10 Cultivation areas located under the canopied forest: cluster of plastic pots with stalks, and Smart Pots and soil bags intermixed with imported soil*



## Appendix A: Photos

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impacts in any one given year over the past decade than is proposed via the permitted and regulated process as proposed. There more direct cultivation on the property prior to permit application than was applied for in the original application.

This overall assessment documents:

This assessment documented 21,195 square feet of cultivation from field work, interviews, written communications, and aerial photography.

The total documented pre-existing cultivation totals **21,195 square feet.**

## Cultivation areas

The results of the field surveys are presented below in tabular form. The survey crew both took GPS points of features and artifacts associated with cannabis cultivation including groupings of smart pots, plastic pots, stem debris and imported soil sites. These results are presented in table form below (table 1).

Number	Description	Total	Square Ft.
DP447	7 Pots, 1 plastic grow bag	7	288
DP448	Smart pots	3	108
DP449	7 Planting indentations	7	252
DP450	6 Pots with cannabis stalks	6	216
DP450	7 Area of planting indentations	7	252
DP1	Soil dump site: plastic pots	132	4752
DP1	Soil dump site: soil bags	3	108
DP451	Plastic pots	4	144
DP452	Platic pots	5	180
DP454	Plastic pots and stem pile	30	1080
DP455	Platic pots	12	432
DP457	Planting indentations	12	432
DP458	Previous water tank location	n/a	n/a
DP2	(3) Grow trenches=420 sq ft 10 pots/stems/branches=202 sq		420
DP3	ft	10	360
DP4	1 grow hole=36 sq ft	1	36
DP5	4 (20) gal smart pots	4	144
Aerial	TerraSync 6/20/2015 Meadow	1	3037
Aerial	TerraSync 6/20/2015 3-acre conv	1	8954
	<b>Total</b>		<b>21,195</b>

## Conclusions

The evidence for long term cannabis cultivation on the Dinsmore Petrushevski property is indisputable. Cannabis production has been occurring on the property since at least through the 215 Era. All aspects of the cultivation process are present on the property and at individual sites. The sites are in areas that follow patterns of the 215 Era artifacts represented by guerilla grows in the canopied areas. As expressed on this property it appears that growers were attempting to conceal their activities to some extent well into the 215 Era and from oral history provided by Mr. Allen and Mr. Petrushevski, well over 10,000 square feet of pre-existing cultivation is documented through interviews. Field evidence provided for high level confidence of at least 9,068 square feet of point data and aerial photography has confirmed field evidence for another nearly 11,991 square feet of pre-existing cultivation.

The second issue of the 3-acre conversion has been resolved with specific communications in writing by Mr. Allen that the permitting process and submission occurred prior to county changes in regulations and was a legal conversion for its intended purposes.

It is clear that the parcel was utilized to cultivate more acres of cannabis with greater environmental

The crew documented areas of cannabis production, noted the evidence at each site, and took GPS points at each concentration of pots. There is strong evidence in the context of the property as being subject to significant clean-up efforts, in that several areas were identified that had clearly been centralized, staging the debris for pick up by trucks during the property owners remediation efforts.



*Figure 14 Location of cultivation areas surveyed and aerial photography*



*Figure 13 Close up showing decomposing cannabis stems, plastic pots with stems, and woody debris growth covering dilapidated plastic pots with stems*



*Figure 11 Previous cultivation area in sunny clearing that has been removed of cultivation debris and the previous water tank site that provided water for the cultivation area*



*Figure 12 Under the forest canopy: plastic pots, cannabis stalks and imported soil intermixed with pots*

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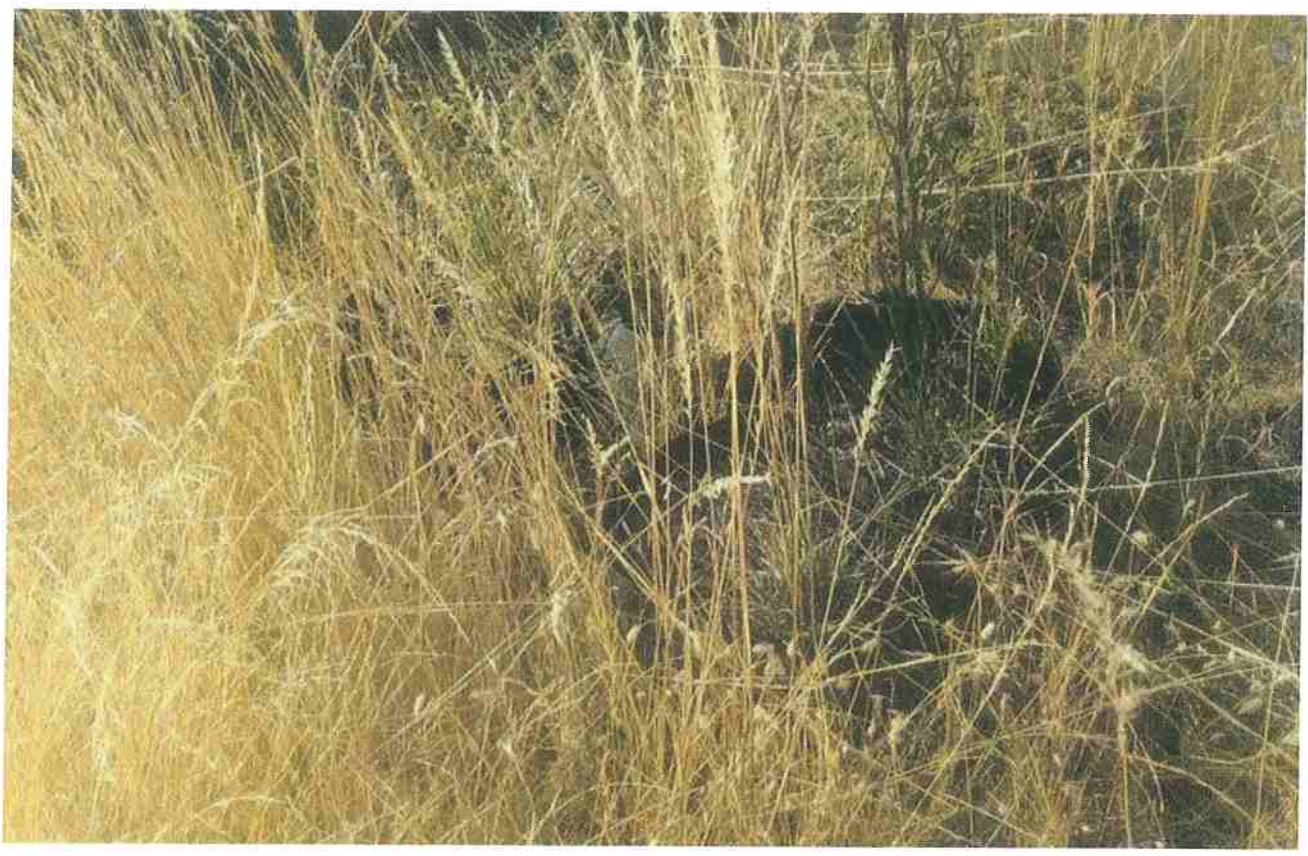


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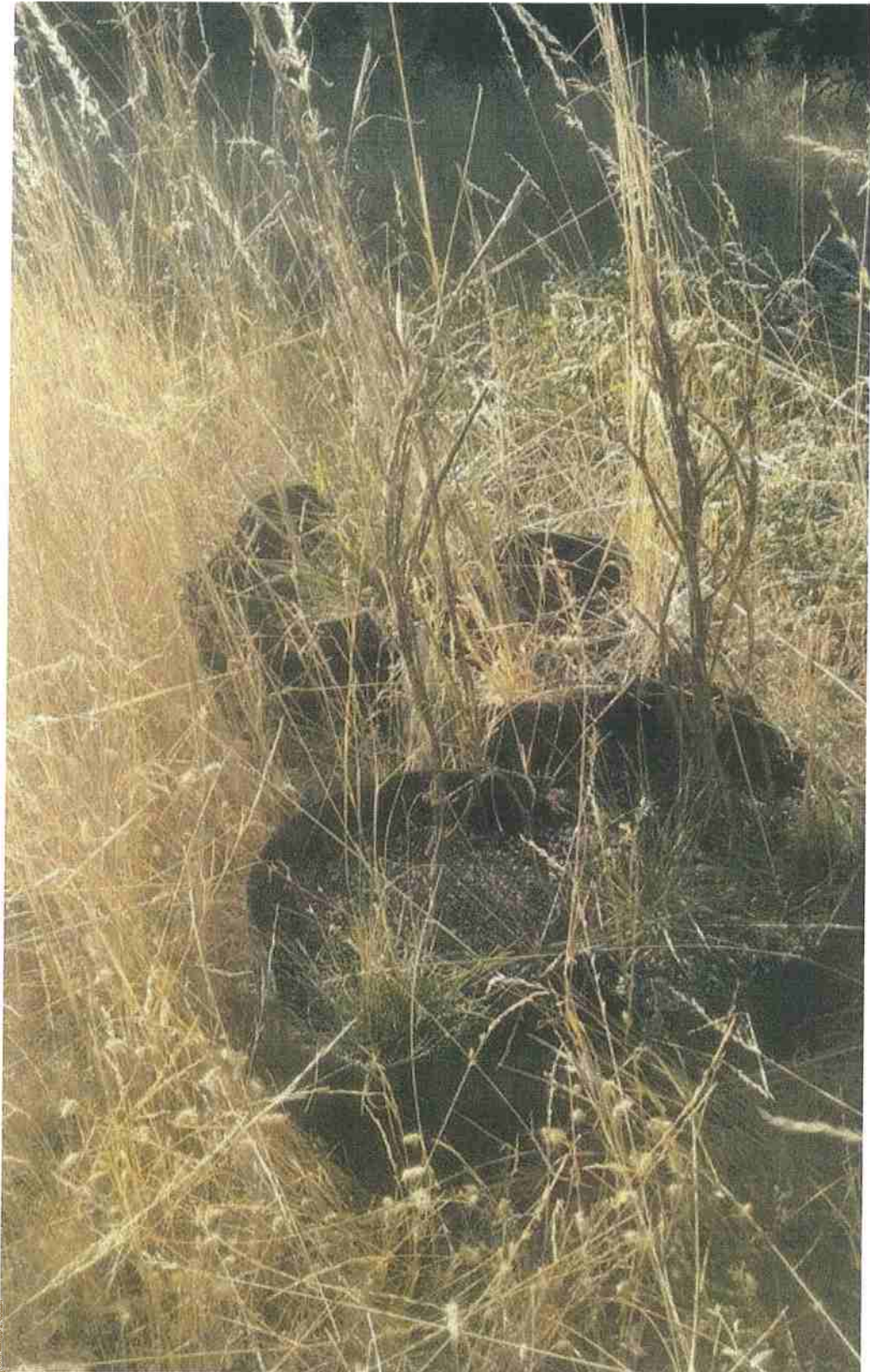
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# Water Resource Protection Plan

## WRPP Map - WDID1B16892CHUM

**NORTH**  
 Map Scale 1" = 200'  
 Contour Interval = 80'  
 Section 32, T2N-R5E, H.B.M.  
 APN 208-271-003

- |                                                                                   |                            |                                                                                   |                          |
|-----------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------|--------------------------|
|  | Property Boundary          |  | Map Point                |
|  | Permanent Rocked Road      |  | 550 Gallon Fuel Tank     |
|  | ATV Trail                  |  | House                    |
|  | Seasonal Dirt Road         |  | Enclosed Shed            |
|  | Class III Watercourse      |  | Open Storage Barn / Shed |
|  | Class II Watercourse       |  | Drying / Storage Shed    |
|  | Point of Diversion (POD)   |  | Cultivation Areas        |
|  | Water Tanks                |  | Developed Area           |
|  | Water Bladder (20,000 gal) |                                                                                   |                          |
|  | 200 Foot Deep Well         |                                                                                   |                          |
|  | Road / Development Runoff  |                                                                                   |                          |

Nov. 15, 2016

