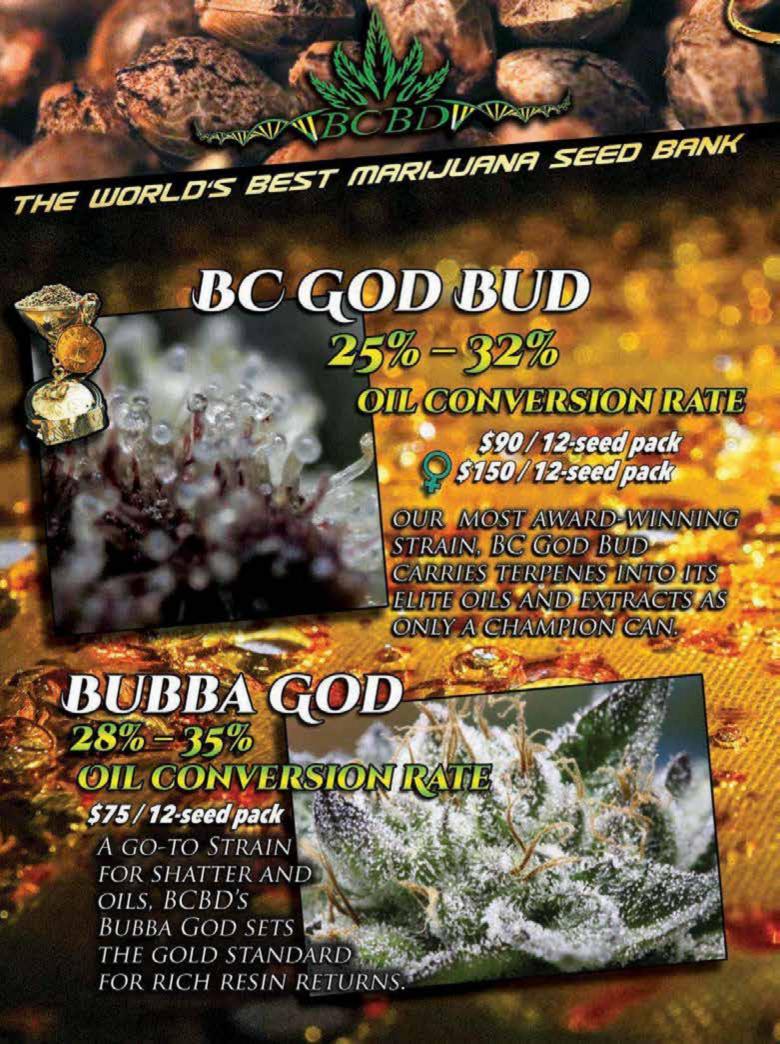
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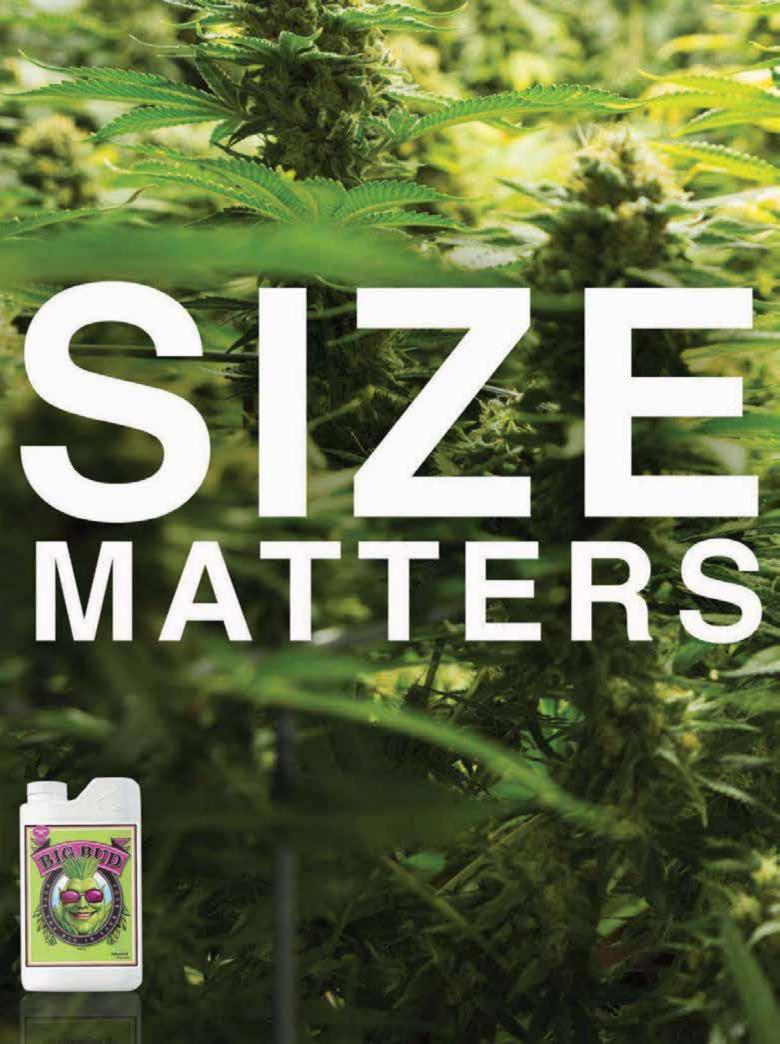


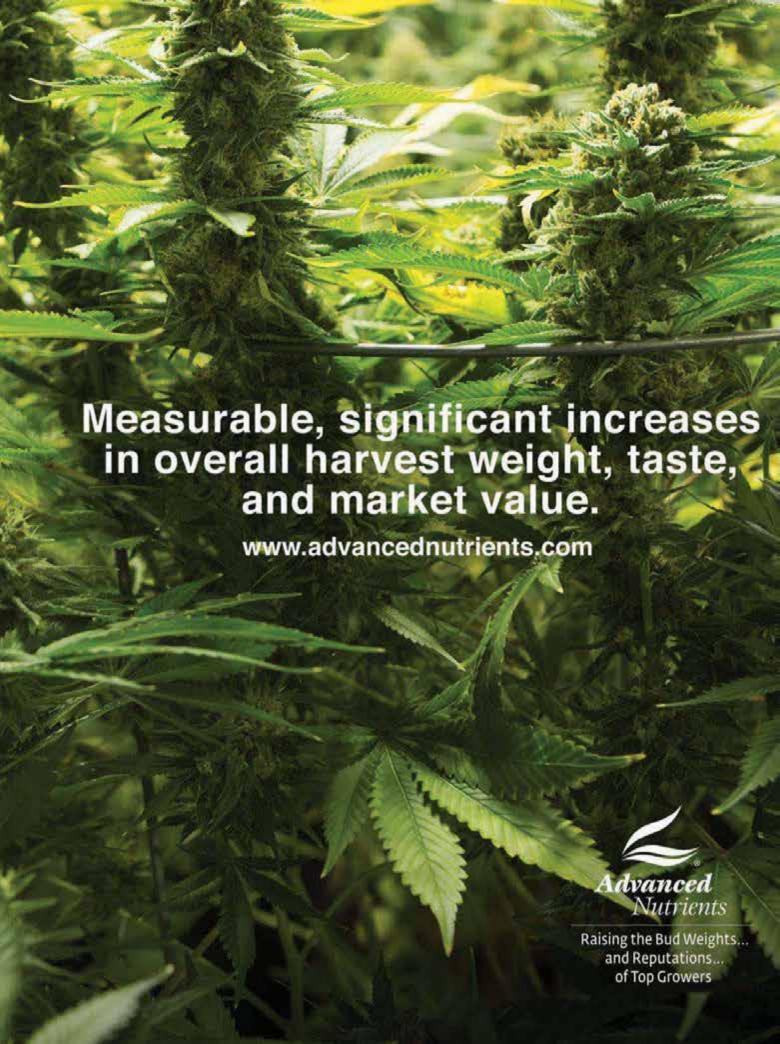


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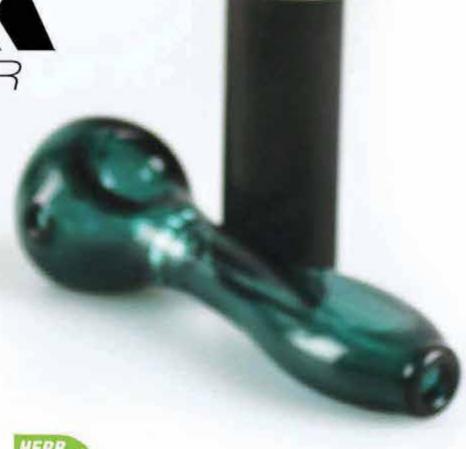
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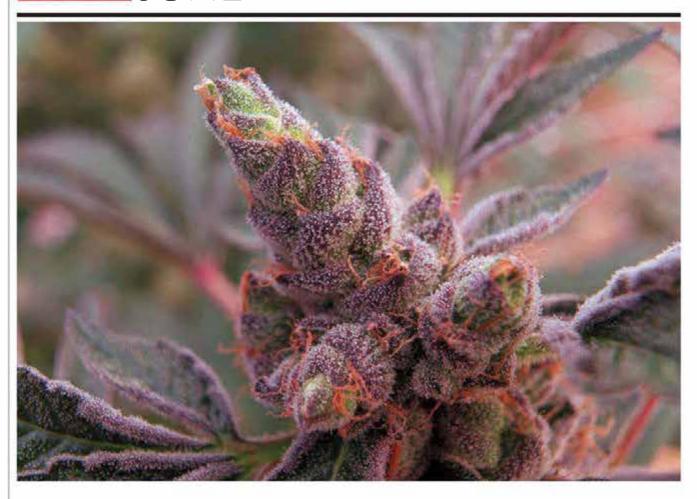
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Spring Planting Guide—page 59

- 10 INTERNET
- 12 EDITOR'S LETTER
- 14 LETTERS
- 16 CONTACT HIGH
- 23 HIGHWITNESS NEWS Expunging weed records and High Five
- 32 ENTERTAINMENT Model & marijuana advocate

Sarah McDaniel and Reviews

- **38 CANNABUSINESS**
- 40 **DMHT** Trans-High Market Quotations
- 108 DEAR DANKO
- 116 GEAR
- 120 EDIBLES
- 122 DR. MITCH
- 126 NORMLIZER
- 130 PIX OF THE CROP
- 134 DOPE RIDER
- 136 NEXT MONTH

#### **44** GROWING AT HOME

Indoor farmers living in prohibition states need secret and stealthy options for producing their own pot. We present to you the steps you need to grow medicinal or connoisseur-quality cannabis in your home, from start to fantastic finish. By Harry Resin

#### **59 SPRING PLANTING GUIDE**

It's the time of year to plant seeds, root clones and prepare your precious pot plants for a summer of growth and an autumn of building buds. Our step-by-step guide lays the groundwork to strengthen your seedlings during this crucial growth stage. By Stinkbud

#### **78** THE HIGH TIMES INTERVIEW: BROKEN LIZARD

The long-awaited sequel to the 2001 cult classic Super Troopers is finally here. To

celebrate, Broken Lizard dropped by High Times headquarters to fill us in on their 17-year journey to making Super Troopers 2. By Mike Gianakos and Mary Jane Gibson

#### 91 SEXUAL HEALING

With nine out of 10 women experiencing painful sex after pregnancy, we investigate how cannabis can help couples return to enjoyable, pain-free intercourse without resorting to surgery. By Jessica Delfino

#### **101 MOTHER COURAGE IN PERU**

Ana Álvarez is the driving force behind Peru's nascent medical cannabis law-a law she fought for to help her child who suffers from epilepsy. While the South American nation is establishing a restrictive medical pot program, Álvarez still faces prison time. By Bill Weinberg



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## COUNTRIES WITH THE STRICTEST WEED LAWS

Traveling can be an uplifting, mind-expanding experience as you get exposed to other cultures and learn a little bit more about the world. And, of course, cannabis can be helpful in the whole mind-expansion department. However, traveling to certain countries with pot, or getting busted for possession can lead to big trouble. Fortunately, *High Times* is taking a closer look at "The Seven Countries with the Strictest Weed Laws" so you know what you're getting into before you book that trip.



We look at possible punishments for different drug crimes and examine how past transgressors were treated. But the bottom line is, if you're heading to any of these seven countries, you'd be wise to leave your weed behind. Head to *hightimes.com* and check out "The Seven Countries with the Strictest Weed Laws" and learn more!



#### **DON INSTAGRAM**

Observe the glorious trichomes on this gorgeous Amnesia Haze bud. These flowers were bred by @royalqueenseedsrq and grown out by @magnetous\_tryko, who says it's "the most beautiful plant I've grown so far, can't take my eyes off of her!" With those deep green, purple and orange hues, we completely understand. Unquestionably, the results of @magnetous\_tryko's indoor, tent grow are easy on the eyes. We hope that Haze tastes as good as she looks.

#### SMOKING POLL

With nine states legalizing recreational pot and 30 states approving marijuana as medicine, cannabis use has never been more prevalent. But has pot's newfound acceptance seeped into the workplace? That's precisely what *Instamotor* set out to determine with their new poll examining marijuana at the office. Surveying 600 pot smokers in recreational cannabis states, *Instamotor* discovered that nearly half (a whopping 48 percent) of all respondents have gone to work high.



When asked how often they go to work high, 39 percent of respondents said, "at least once per week," 28 percent said, "several times per year," 18 percent said, "not within the last year" and 17 percent said, "at least once per month."

Interestingly, the survey also revealed that 73 percent of the respondents who got high at work believe they do their jobs better while high and 74 percent admit to working high before marijuana was legalized in their state. Fifty percent think they'd be fired if their altered state were discovered.



### WE WANT TO HEAR FROM YOU!

Tweet your best high observations and comments our way @HIGH\_TIMES\_Mag for a chance to be featured on this page! And be sure to follow us on Facebook: (Facebook/HighTimesMag) and Instagram: (@hightimesmagazine) for all the latest news as it's happening!

@clarke25: @HIGH\_TIMES\_Mag Some strains make a big difference. Some strains make me hyper and super productive. While others tend to medical needs of pain and sleep and require a different strain for that effect. It all depends on the person and strain.

@DannyDurzo: @HIGH\_TIMES\_ Mag That's great news can't wait to go to Massachusetts and buy legal weed... wish New Hampshire would realize the great potential legal weed would have on our great state

@PalisadeFind: The United Kingdom seems to be hypocritical with respect to its #marijuana policy. It's a bit confusing as they ban #cannabis while exporting the most in the world.

**@TheAscoreCore**: @HIGH\_TIMES\_ Mag Hey, if it does not shatter then it does not matter

@Anony\_Mouse777: @HIGH\_TIMES\_ Mag The US Government has no issue with presenting lies to the American people. @realDonaldTrump is responsible. He could appoint people who recognize reality but has buckled to the pressure of the #swamp. #DrainTheSwamp

@SwampRob: @HIGH\_TIMES\_Mag Many studies have shown that there is no correlation between illegality and drug usage. Keeping them illegal only helps the black market (and prisons for profit).

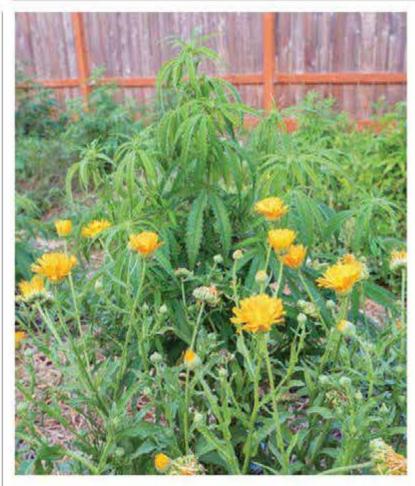
@Funkingroovin\_: @HIGH\_TIMES\_ Mag It's a well known scientific fact that Earth remains the only planet in all the universe where marijuana is still illegal in some places.

@IBCS4Advocate: @HIGH\_TIMES\_ Mag Beautiful buds. My plan is to retire & have a farm with one of the crops being beautiful buds.

**@kicks\_n\_pups:** @HIGH\_TIMES\_Mag Making pie, gettin High, eating more pie forgetting that it's getting me high.

@WebbHubbell: Past U.S. Presidents admit to experimenting with marijuana, yet millions went to jail for the same conduct. It's time to pardon all possession offenders. Give them their life back.





## **SPRING IS IN THE AIR**

"Spring is the time of plans and projects." -LEO TOLSTOY

IT'S THAT MAGICAL TIME of year when the days grow longer and the sun begins to warm the earth once again. Spring represents a time of renewal, and the preparation and proper planting you do now will result in bigger yields and heavier harvests in the fall. But there are certain factors that you must understand and put into practice in order to achieve fruitful success later.

That's why this issue features our "Spring Planting Guide," starting on page 59. There's more to getting started than simply planting seeds, rooting clones and preparing soil, and our cannabis-cultivation correspondent StinkBud highlights the many different components to prosperous planting.

We know that not everyone grows outdoors or in a greenhouse, and for those who prefer year-round indoor farming, we present an article on growing small-scale quality cannabis at home. Next up, our exclusive *High Times* interview (and this issue's cover) features the cast of *Super Troopers 2*—the hilarious sequel to the cannabis-infused cult classic starring the Broken Lizard crew.

We also spotlight an incredible and inspiring story of a mother in Peru fighting for medical cannabis for her sick child—another reminder that our fight to free the healing flower continues. Finally, our take on sex and pot underscores ways that couples can enhance their lovemaking with cannabis and also calls attention to how marijuana-infused products can aid in post-pregnancy sex.

So dig in, plant some seeds and get growing!

Danny Danko
SENIOR CULTIVATION EDITOR

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#### STONED AND PROUD

I was flipping through my new issue of your fine publication when I saw the "Smoking Poll" [April 18, "How Do You Think Stoned Driving Should Be Addressed?"]. In my opinion, people who have never tried marijuana and who have been lied to about it through politicians, etc. need to experience with their own minds and bodies the effects of being high. I say we have a little test and show them what it's about. Regardless of the outcome, I assure you the effects of alcohol are much worse every time. We should be proud, passionate and most of all honest when it comes to decisions on passing laws. We are on the right side. We have nothing to lose by being honest and forthright.

> Joe S. Thomas Georgia

#### WHAT A WASTE!

Reading the figures provided in "Marijuana by the Numbers" [March 2018] had me mesmerized but not surprised. The amount of plants seized, in particular. Being an environmentalist, I couldn't help but think what an utter waste. We all know how ridiculous prohibition is. Perhaps the environmental cost is often overlooked among all the other associated stupidity.

Austin D.

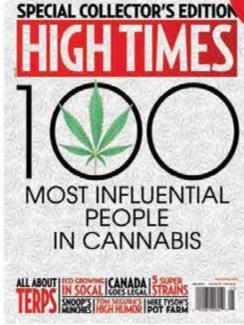
#### **HEALING HERB**

In 2005 I was diagnosed with Crohn's disease. I get a list of prescriptions that cost over \$1,200 a month. Every few months the doctor changed my prescriptions trying to find something that would work for me. For eight years this went on with no relief. The best I could do is go 3-4 days between flares. My quality of life was practically nil. I could hardly leave the house.

For years friends recommended I try medical marijuana. I thought it was a useless drug to get you high. So, I never went anywhere near it. In 2013 I moved to Tucson, AZ. Near the end of my visit the doctor told me that marijuana helps with Crohn's and asked if I had tried it. I told him no because I seriously didn't believe the drug could possibly do me any good.

About a month later a neighbor heard me screaming from the pain. Next morning, she slipped me some weed. I didn't expect it to do anything but maybe help with the pain and it would be a blessing if it would just do that.

For two weeks I did not have a single



PEOPLE WHO HAVE NEVER TRIED MARIJUANA... NEED TO EXPERIENCE WITH THEIR OWN MINDS AND BODIES THE EFFECTS OF BEING HIGH.

flare. To say I was blown away would be an understatement! I called my doctor and told him the results. I was approved for a medical marijuana card and the rest is history.

I tried straight CBD. It helped but not as well as the whole plant tincture I made. I was buying buds and I was having a flare about every 6-8 weeks. Then, another MMJ patient introduced me to concentrates such as shatter. I switched to concentrates and only had a mild flare every 4-5 months.

More time passes and I dialed my dosage of cannabinoids down to a science. This way my body gets enough while avoiding much of the high I don't like. Today I microdose. 13-14 mg of cannabinoids a day, and I stay healthy. My most recent mild flare was almost seven months ago! Marijuana is the only thing that ever helped me.

W.H. (Two Bears) Lambdin Tucson, AZ

#### **BOOZE VS. BUDS**

In reference to your April 2018 article ["Driving High"], I would agree that there isn't an adequate way to tell if someone is under the influence of cannabis and there needs to be one. But I disagree that just because someone is a frequent cannabis

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user they should get a pass on DUI.I'm a retired veteran and only had

the choice of alcohol during that time. I built up a tolerance to alcohol just as you describe for frequent cannabis users but it would not matter on a breathalyzer, although I would be more coherent than the average drinker. I could drink 12 beers [while] a non-drinker [would have] four in the same time period and I would do way better than them on a field sobriety test. As a veteran that has smoked both before and after my military career, I'm a total believer that cannabis is much less destructive than alcohol and in fact helpful for a person's wellbeing. I'm all for cannabis legalization but no one under the influence of anything should think they are ok to drive, period!

> Brian Mississippi

We're certainly not encouraging anyone to drive under the influence of anything. However, there's little doubt that alcohol affects fine motor skills differently than cannabis. It's part of what makes stoned driving so difficult to legislate and enforce. The effects of cannabis and alcohol are not comparable.

#### DON'T GIVE UP THE FIGHT

I'm from a small town in Indiana, battling for legalization and pushing for our rights. In the past year, I received my first offense for \$4 worth of marijuana. I had to pay court costs and take a 7-hour class as punishment. My youngest brother just recently caught his first charge not long after that with about the same amount of marijuana in his car. He was driving, I was a passenger in the situation. He has been put on house arrest for 45 days, for \$4 worth of marijuana. I think it's time for a change. We should have freedom of our own choice in healthcare. We need weed. I just think that the idea of nature being illegal seems a bit unnatural. We are still fighting for legalization in our state. I suffer from chronic anxiety, PTSD, fibromyalgia and depression. I'd love to be able to use cannabis to cure my problems. I've tried a lot of drugs and cannabis seems to be the only thing to cure without creating other problems or addictions.

> Ophelia Indiana



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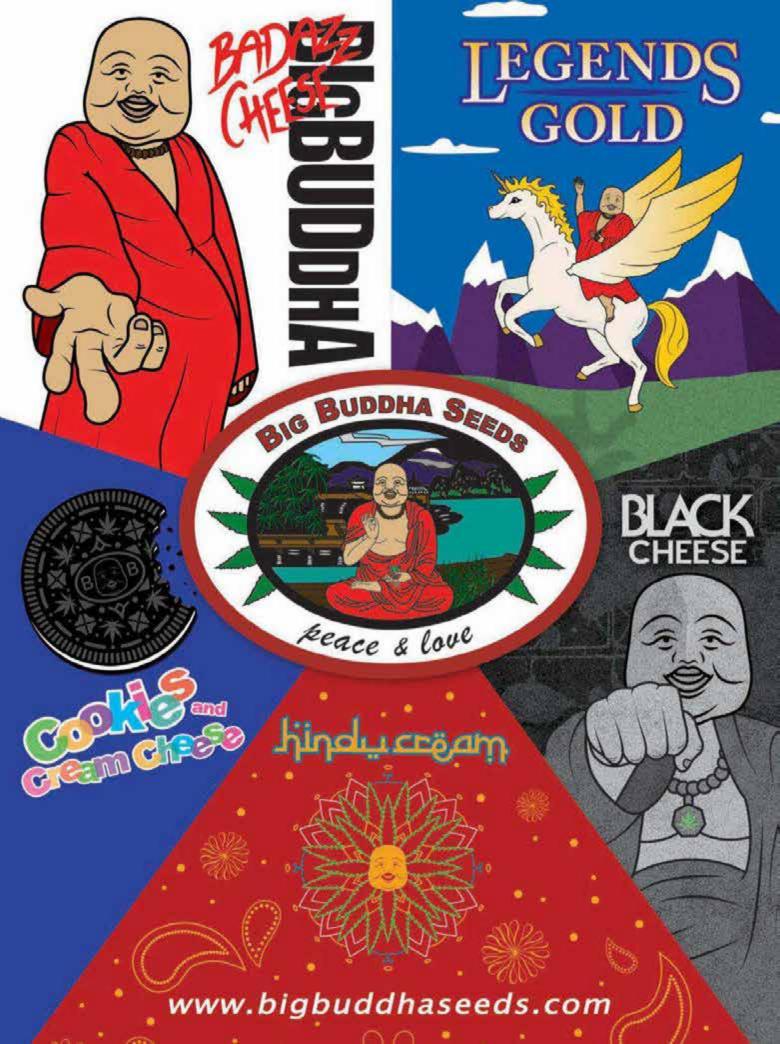












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**ENTERTAINMENT** 

#### SARAH MCDANIEL

Model, actress and writer Sarah McDaniel has a new CBD-based skincare line coming soon... p.32



REVIEWS

#### JONNY COUCH

Punk rock veteran Jonny Couch's solo debut, *Animal Instinct*, will hook you with crafted tunes. p.36





# **ERASING THE PAST**

ACROSS THE UNITED STATES, MINOR AND NONVIOLENT MARIJUANA CONVICTIONS ARE BEING EXPUNGED, EVEN IN STATES THAT ARE NOT QUITE WEED-FRIENDLY. REPARATIVE JUSTICE IS BECOMING A CRUCIAL PART OF THE GREEN REVOLUTION. BY MIKE DIPAOLA

AMONG THE MANY benefits of legalization, one of the most significant is the opportunity to redress injustices of the Drug War. We can never give back the years lost to victims of failed tough-oncrime sentencing, but we can help former "criminals" get on with productive lives through expungement, the process of erasing a rap sheet that never should have been written in the first place. A police record makes it tough for people to find employment or housing, qualify for financial aid or insurance, gain

custody of children and, not least of all, participate in the now-legal marijuana industry.

This year, as weed enthusiasts celebrate the growing green revolution, expungement is all the rage. Ground zero is California, where officials up and down the state are about to dismiss or reduce thousands of drug-related convictions that go back decades. This slate-cleaning is the result of a provision in Proposition 64, the voter initiative that legalized weed in the Golden State, which allows

people to petition the courts for dismissal or reduction of their convictions. The Drug Policy Alliance estimates that more than a million Californians could be eligible to have their records cleared.

San Francisco City District Attorney George Gascón has begun the process to dismiss 3.038 misdemeanors and will consider reducing an additional 4,900 felony marijuana charges, some from as far back as 1975. Not surprisingly, these prosecutions have disproportionately affected African Americans. "Long

ago we lost our ability to distinguish the dangerous from the nuisance," Gascón said in a statement, "and it has broken our pocketbooks, the fabric of our communities, and we are no safer for it."

Farther south, Los Angeles County has around 40,000 weed-related felony convictions dating back to 1993, and the DA's office says it is trying to tailor the expungement process to help the neediest, such as people applying for jobs. In San Diego, the district attorney and the public defender have teamed up to identify and process expungements for thousands of people who had been arrested under defunct laws that no longer apply.

On a smaller scale, the erasure of criminal records for weed infractions is catching on elsewhere in the country. Seattle is about to vacate hundreds of misdemeanor pot convictions from 1997

until 2010, when the city stopped such petty prosecutions as a matter of policy. "The war on drugs had devastating impacts on people, especially people of color and their families," Mayor Jenny Durkan said in a statement. Indeed. African Americans were arrested at three times the rate of whites across the state.

Philadelphia's District Attorney Larry Krasner has dropped dozens of criminal charges for marijuana possession and instructed law enforcement that future collars for possession would not be prosecuted. "We are going to tell them, yes, drop any cases that are simply marijuana possession," Krasner said at a press conference. "I did it because I felt it was the right thing to do. We could use those resources to solve homicides."

The Vermont Legislature, which recently passed a recreational-weed law, is now mulling over a measure to make it easier to expunge misdemeanor convictions. Vermont Public Radio reports that the proposal would let people who were nabbed for two ounces of weed or less clear their record immediately after serving their sentences, rather than waiting five years as the current law dictates.

#### A POLICE RECORD MAKES IT TOUGH FOR PEOPLE TO FIND EMPLOYMENT OR HOUSING... GAIN CUSTODY OF CHILDREN AND, NOT LEAST OF ALL, PARTICIPATE IN THE NOW-LEGAL MARIJUANA INDUSTRY.

It is encouraging to see movement toward decriminalization even in states that are not particularly pot-friendly. The Virginia Senate recently passed a bill that would allow first-time violators for possession to pay a \$150 fine and erase their criminal record. That's not ideal, obviously, but it moves the needle toward real decriminalization, which incidentally is supported by 76 percent of Virginians, according to a recent poll by the Wason Center for Public Policy at Christopher Newport University.

Other states-Colorado, Maryland, New Hampshire and Oregon-have already, in varying degrees, made it easier for people to get their records sealed or expunged. Massachusetts is now considering a bill that would allow people to strike out convictions for past offenses that are no longer illegal-like, for example, marijuana possession.

Not everybody is enamored of the

trend to expunge, though, as some prosecutors must feel as though their life's work is being erased. (Tough!) In Nevada, an expungement bill was proposed that would have required judges to seal records and vacate judgments for marijuana offenses that are no longer illegal. But the governor, Brian Sandoval, vetoed the plan.

The erasure of petty pot crimes is a good start, but, as long as we're in an expunging mood, we should take the trend to its logical conclusion by vacating all weed-related nonviolent felony charges as well-those made against growers and dealers, for example, whose only crimes were in being ahead of their time. While we're at it, let's return the property and cash stolen from peaceful citizens through asset seizures. We have a long way to go to redress these injustices, but the current mood looks promising.

### **HIGH-TECH DELIVERY**

THE MANY METHODS FOR ADMINISTERING MEDICAL MARIJUANA. BY FRANK GREGORY



#### Syqe Medical, a startup company out of Tel Aviv, has developed a pocketsize inhaler that can be 3-D printed, allowing doctors to precisely prescribe the proper dose of medical marijuana to patients. This delivery method is currently in use at Rambam Hospital in Haifa. The gadget is loaded with cannabis cartridges, a caregiver interface, thermal and flow controllers, lung interfacing and wireless connectivity to clinical databases. It solves problems

doctors face in prescribing

the appropriate dosage of



## **WEED GUM**

A marijuana gum that combats gastroenterological disorders such as irritable bowel syndrome (IBS) is in development by AXIM Biotech. IBS causes unpredictable pain from stomach cramps, bloat and diarrhea. CBD has been shown to be an effective treatment. Due to the nature of the disorder, there is a need for a practical. quick and effective delivery method, which AXIM Biotech is tackling with its CanChew+. The firm indicates the gum will deliver a sustained dosage of CBD for effective and rapid treatment in a highly bioavailable form.



#### **SUPPOSITORIES**

Many doctors are advocating for suppositories as the ideal delivery method for medical marijuana. Smoking cannabis and eating edibles are less efficient than using suppositories, which provide better absorption more quickly than any other delivery method. With suppositories, cannabinoids are absorbed into the bloodstream via the mucous membranes in the rectum. Suppositories are gaining popularity in the medical cannabis community, and they're readily available in states that allow marijuana for medical purposes and are easily made.



#### **NEBULIZERS**

CannaNeb, a San Diegobased company, launched the first cannabis nebulizer offering the purest, cleanest method of administering medical mariiuana. The CannaNeb kit includes six therapeuticgrade cannabinoid-extract blends that effectively treat multiple medical conditions. The form of administration is a fine, cold aerosol mist of one to five microns, with no heat or combustion necessary. This iet nebulizer is portable and affordable, and it administers odorless medication.



#### TRANSDERMAL PATCHES

Cannabis Science Inc. has developed a transdermal patch for testing on fibromyalgia and other nervepain disorders. Several companies offer cannabis transdermal patches. These work just like nicotine patches and deliver cannabinoids through the skin and into the bloodstream. Patches contain THC and CBD in different ratios depending upon the ailment being targeted for treatment. An alternative patch type under development is the trans-mucosal patch, which would be placed on the gums.

medical cannabis.

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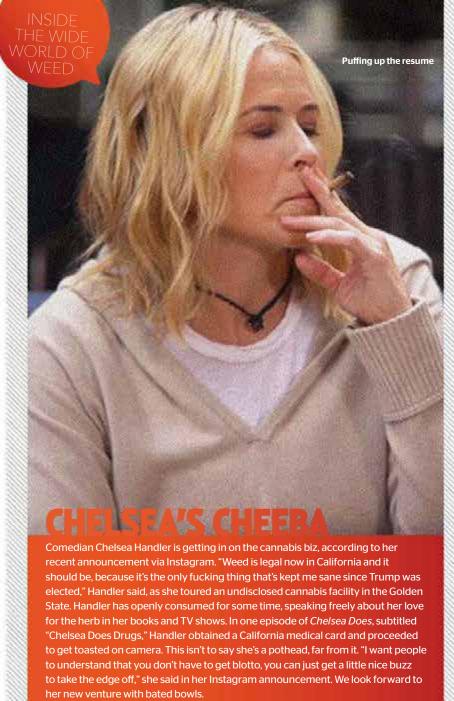


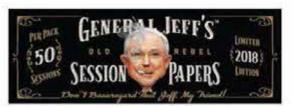
#### **KEYSTONED COPS**

A pair of police officers in Toronto raided a dispensary recently and surreptitiously ingested some of the confiscated edibles. Nothing good happened after that. According to Toronto radio station Newstalk 1010, the two felt no effects of the goodies at first so they ate more, then more again. When the weed finally kicked in, it kicked in hard. The pair, still on duty, freaked out and called an ambulance and more officers to their rescue. But when backup arrived, one of the cops cheesed it on foot; in the ensuing chase, one of his uniformed colleagues slipped on the ice and sustained a head injury. The dumbass duo complained of hallucinations, prompting a debate on whether pot could possibly cause hallucinations (see Dr. Mitch on p. 122). No criminal charges have been filed against these idiots, yet. The police force's professional standards unit is investigating the mayhem.

#### **HOLY MISTRIAL**

The International Church of Cannabis, one of the grooviest houses of worship we know, has temporarily beaten the rap for public consumption. A Denver County Court judge declared a mistrial in the case when city prosecutors realized they couldn't fill the sixperson jury. Church founders Steve Berke, Briley Hale and Lee Molloy had been cited for public cannabis consumption and violating the Colorado Clean Indoor Air Act, pursuant to some sacramental blazing done at the church's 4/20 event (their high holy day!) last year. Several potential jurors questioned the use of city resources to prosecute such a benign activity in a city where "hundreds of people do it" according to Westword. Unfortunately, the accused will have to stand trial again in 15 months. "We would've won today," Berke said after the mistrial was declared. "I think this is a travesty to the city and people of Denver to have to pay for this again."





#### **SESSHIN' WITH JEFF**

When is it a good time to smoke a joint with Jeff Sessions? Whenever you want, according to the merry pranksters of #JeffSesh, who are selling a line of rolling papers featuring

the grinning, toking face of the Attorney General on the pack. The product's tagline, "Don't Beauregard That Joint, My Friend," mashes up the iconic Little Feat lyrics with Sessions's ridiculous middle name. "We are upstanding citizens who don't want to hide every time we want to enjoy a sesh," according to the group's website, *jeff-sesh.squarespace.com*. "And frankly, we're offended the top law enforcement officer in the nation thinks we're bad people." The papers quickly sold out, but more are on the way, with a portion of the profits to be donated to the Drug Policy Alliance. There is something right and proper about firing one up with the nation's top cop, who incidentally stands for everything we oppose. What a time to be alive.

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#### WHAT BLAZES IN VEGAS, STAYS IN VEGAS

Now that visitors to Sin City can legally purchase weed, there has come a need for the proper disposal of unused product as visitors depart. To that end, the city has installed bins at McCarran International Airport so that passengers can dump their stash before getting the federal pat-down at security. Bright green and labeled "Disposal for Prescription and Recreational Drugs," the bins are located outside, with at least three positioned in the rental-car return lot. The so-called "amnesty boxes" are bolted to the ground and designed so that what gets dropped in cannot be removed. They're probably necessary, as Vegas is a big-time tourist town with a young but thriving cannabis industry, but public consumption is banned in hotels, casinos and on The Strip. Colorado has at least two airports with similar dump-as-you-leave facilities. No one wants to part with their stash, but sometimes you just gotta catch a plane.

#### FIRST NATIONAL DANK

Finally, the feds have agreed, conditionally, to back a Colorado credit union that seeks to serve pot-based businesses. Unfortunately, the condition is a big one: Fourth Corner Credit Union will not be allowed to take clients that actually handle weed-dispensaries and growers-as it had originally hoped. It would be able to take accounts derived from ancillary businesses, like accountants, advocacy groups and the like. The credit union must also obtain deposit insurance from the National Credit Union Administration, according to the Wall Street Journal, and if Fourth Corner cannot secure its backing, it will have to find a private insurer. "It's been the mission of the Fourth Corner Credit Union to bring about fully legal banking to the marijuana industry," said Mark Mason, an attorney for the bank. But "there are many ancillary businesses that have trouble getting bank accounts because they do business with marijuana [companies]."



Can you ever have too much weed? There is growing concern that in Oregon, the answer is "maybe." US Attorney Billy Williams, perhaps feeling a bit frisky since the Department of Justice freed him up to prosecute cannabis infractions even in legal states, told a bunch of law enforcement types and cannabis industry reps recently that the state was producing too much weed. "Here's what I know in terms of the landscape here in Oregon, and that is, we have an identifiable and formidable marijuana overproduction and diversion problem," Williams declared. The problem being that the state is producing three times more weed than can legally be consumed, and that the surplus is being illegally trafficked to not-so-legal states. Williams has said previously that many states are seizing Oregon-grown pot, with more than a ton leaving the state via the post office in 2017 alone. Memo to prosecutors: This won't be an issue when weed is legal everywhere.



#### SHROOM FOR IMPROVEMENT

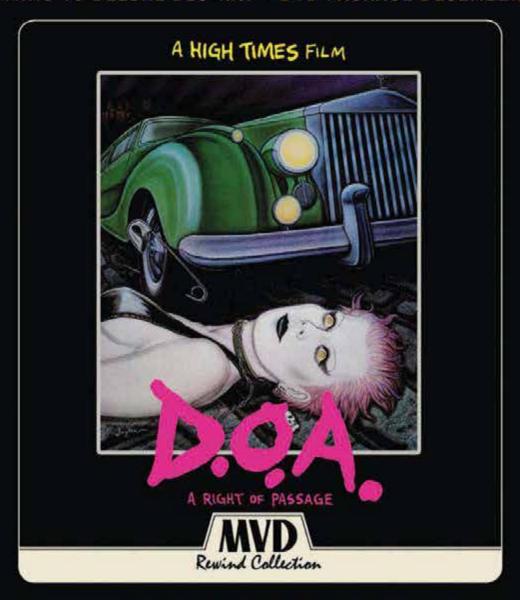
Do psychedelic mushrooms bring us closer to nature, and farther from authoritarianism? This is a question posed by researchers from the Psychedelic Research Group, Imperial College London. Writing in the Journal of Psychopharmacology, the researchers begin with the premise "that classical psychedelic compounds can induce lasting changes in personality traits, attitudes and beliefs." From there, they investigated whether "nature relatedness and libertarian-authoritarian political perspective" in patients with depression were among those lasting attitudes and beliefs. Long story short, the answer is "probably." The study compared seven participants who had tripped to another seven who had not, then surveyed them on

their political views and "nature relatedness" over time. From this admittedly small sample size, they found the trippers grew closer to nature while the control group showed no change. The authors caution against making "strong claims about a causal influence due specifically to psilocybin." More study is required.



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AS A MODEL, ACTRESS, WRITER & ENTREPRENEUR, SARAH MCDANIEL IS QUICKLY ESTABLISHING HERSELF AS ONE OF THE MOST RELEVANT WOMEN IN CANNABIS. BY MARY JANE GIBSON

**So you're a California girl.** Absolutely.

#### When did you start modeling?

I started modeling when I was around 16. A friend of mine had a clothing company, and she just kind of wanted to use me. I had no idea how to pose, so she's actually the one who taught me how to use the light and manipulate your image.

### Were you smoking marijuana at that time?

Yes! Actually, she introduced me to marijuana. She was coming off certain pills from a surgery, so she was using marijuana in place of that for her pain. I ended up trying it even though I was terrified, because all I saw up to that point were the commercials where your dog's disappointed in you and you're melting into a couch. But after I tried it for

the first time, I realized it's not malicious at all. It's really just very calming.

# Were you aware of the medical benefits of cannabis from the beginning?

I was aware that she was using it for the medical benefits. But I had no idea what CBD was—I thought it was only about THC. I had no idea you could use it and not get high. Since then, I've definitely come a long way.

## How do you feel cannabis fits into your philosophy?

Well, my life philosophy in general is that you should constantly be changing and adapting and breaking down things that you think are true and questioning them. I think that cannabis intertwines with that because it kind of pushes you into that realm of thinking

differently, so you're considering all sides.

# Absolutely. It pushes boundaries and helps you see things from a different perspective.

And with more empathy, too.

#### Do you think if Jeff Sessions smoked weed, he would understand something about the plant?

I wonder that so often of people who are so closed-minded. If they were to experiment with certain things—maybe if Donald Trump were to smoke DMT a couple times, would he change [his perspective]? I would love to see that. I'd love to see a controlled, scientific study of people who are extremely closed-minded smoke every day for a month, and see if they change. I bet they would.

How did you first realize

### the importance of medical cannabis?

I first started looking into cannabis on the medical side when my friend's mother had cancer that returned three separate times. She would use Rick Simpson Oil every single day, huge amounts, and the cancer would recede. Then when she would go back to her old ways and not use the oils, it would come back. The only thing that was working was cannabis. So that's when I realized there's so much more to this plant. That's when I started using CBD tinctures. It's awesome.

### How do you incorporate cannabis into your daily life?

I use my cannabis oil for my face every day, and that is basically just vitamin E, coltsfoot, lemonpeel extract, astragalus, jojoba oil and CO<sub>2</sub> oil. I just put it on my face in the morning and at night, and it's kept my skin amazing. I also made my own little



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concoction of the CO<sub>2</sub> oil with shea butter and cocoa butter, and I use that for my body. That helps with eczema or any scars and things like that.

## Can you tell us a little bit about Walagoot?

It's a CBD-based skincare line that's hitting the market very soon. It's completely organic, and it helps against the free radicals and helps with antioxidants.

### Where and when will it be available?

We're currently talking to investors, but I think the way we're going to do it is hit up dispensaries first. It's still a gray area as far as selling it everywhere. Even though it is 90 percent CBD, there is that little bit of THC in there, so you can't really have it at Whole Foods yet. Lately, I have been experimenting with Denver Terpenes' products as well and adding some into my new creams.

#### What are your favorite strains?

I've kind of switched from the flower itself over to concentrates. I don't know if it's cleaner or what, but I feel like when I smoke flower, it's harsher on my lungs. So I've been sticking mostly to dabs. I do mess with edibles, but

# "IF DONALD TRUMP WERE TO SMOKE DMT A COUPLE TIMES, WOULD HE CHANGE [HIS PERSPECTIVE]?"

on a very small dose, maybe like a lollipop that's five milligrams or so. I love my pen because I can just travel with it everywhere, and in traffic it's fucking amazing. I get migraines, and if I smoke within five minutes, it's gone. It's awesome.

Do you find yourself educating people about cannabis, especially as an alternative to alcohol and to pain medications? I do, and I never thought I would be that person. But there's so much overwhelming evidence, and also so many people addicted to opiates and things like that, I think it's important to present them with an alternative. Like, for instance, my mom, who is addicted to Xanax. Once she tried CBD and the concentrated oils, she's completely off of [pharmaceuticals], and she seems more healthy than she's ever been. So I just feel like I have to try and spread the word as much as I can.

We're undergoing a massive cultural shift with the #MeToo movement. As a model and an activist, what are your thoughts

#### on the movement?

This is such a heavy question. The thing that scares me is that I think both sides are manipulating. I think that some women are coming forward that have completely the right to do that and they should voice what they're experiencing and they're completely in the right. And I think that men obviously are in the wrong in that scenario. But I do believe that some women are taking advantage of the #MeToo situation and coming up with things to get attention because of the movement. I think it's just a time to be really conscious of the moves we're making. But also, it's hard to speak on it because I haven't been a victim of that situation, so, obviously, I don't completely understand it.

It's a big question. I think that it's something we need to keep talking about in general. We need to continue the conversation. Continue to ask questions and listen.

I think it's crazy how many men don't believe that #MeToo is real or they think that women are overreacting, or I've seen the opposite, where men say, "Well, if I'm on a date now, how am I supposed to know if I can go home with a girl? Is it going to turn into a #MeToo situation or something like that?" It's just like, why don't you ask her, you know? She's right there!

# What are your plans for the future? How do you envision the next year unfolding?

I have two movies coming out this year that I can't yet talk about yet. But they're both psychological thrillers, so that'll be exciting. Definitely go to those high. And obviously with Walagoot, I'm looking to really expand that and show people how well it works. That's the first thing I want to show people.

I want to talk about mushrooms for a second. I'm fascinated by the medical aspects. Absolutely.

#### How do you feel about them?

This is such a big subject. I grow them myself, and I really believe in the therapeutic ways that they can work. I just think it's like seven years of therapy in, like, six hours. That's how I think of it. Or it can be a recreational thing. You can take some and go to laser tag. It doesn't have to be heavy every time.

## I wanted to ask you about shooting *SuperHigh*.

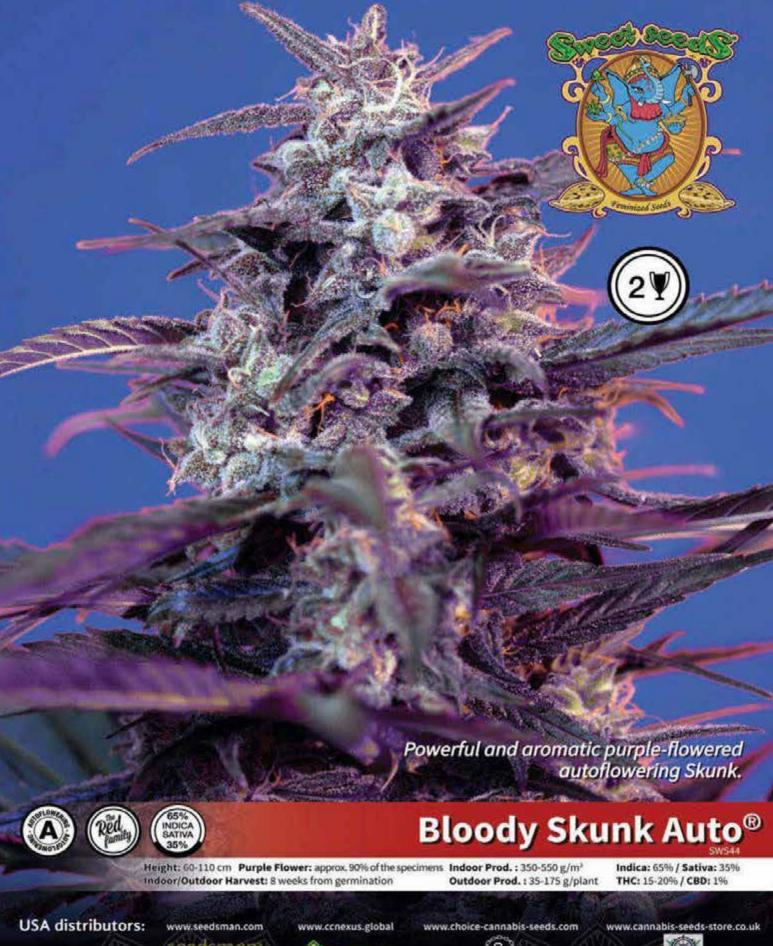
That was really fun. It was incredible working with comedians of that caliber because that's my first time working on something comedic, and just seeing how fast the [pace was]. Hopefully there'll be a second season. Because Mexico is into it.

#### Really?

They're like the biggest fans, surprisingly. It's weird to see my voice dubbed in Spanish.

#### Did you blaze on set?

They only allowed us to smoke this weird grass. It wasn't weed at all. It was the worst. But there was this guy, his whole job was to roll fake joints all day. He was my favorite guy. ¥

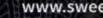
















## **GET COMFORTABLE**

JONNY COUCH WRITES POP SONGS YOU CAN SINK INTO.

PITTSBURGH NATIVE JONNY Couch left his Rust Belt hometown in the early aughts for the neon lights of NYC, where he played drums in a number of punk-rock bands. In the ensuing decadeplus, much of the neon was replaced by LED chasers, and Couch's interest in playing drums was supplanted by a lust to write songs and front a band. His debut effort, *Animal Instinct*, is a collection of warm, analog-synth-heavy pop songs that blend the dancey edge of New Romantic greats Visage and Ultravox with the softer tones of modern keyboard-driven popsters Future Islands and Tame Impala. The tunes are tightly crafted and hooky, but the real key is Couch himself: Friendly, slightly rotund and so committed to



JONNY COUCH Animal Instinct (Self-released)

wearing a certain battered black cap that he mentions it in his press material, Couch comes across in person as at once self-deprecating and confident. On the album, he's a passionate lover, painfully aware of his shortcomings but hopeful that the object of his desire will forgive him and fall into his arms anyway. His vocal style is unique in that he achieves

a kind of '50s croon with the same success that a high-school DJ pulls off the smooth tones of a commercial radio announcer, which is to say that it sounds at once unpolished and charming. This lends an undeniable appeal to the entire effort, from "New Kind of Cruel," which would be right at home on the soundtrack to 1983's *Valley Girl*, to the dreamy "Animal Instinct," with its John Carpenter–level budget-synth punctuation marks, to the driving "State of Mind."

I once saw Couch and his band play in front of an auto-body shop in the middle of a white-hot day to about 12 people and a large washtub full of crawdads. Couch dropped sweating to the scorching sidewalk and reached out a trembling hand to a passerby. She stopped and gave him a chance. Maybe you should too! *Polly Watson* 

#### MUSIC RECOMMENDATIONS



TUNE-YARDS I Can Feel You Creep Into My Private Life (4AD)

Tune-Yards's newest is a musical tonic for our planet's never-ending news horror cycle—a deconstructed pop album that manages to be both overtly political and foot-stompingly enjoyable. The bright ticky-tack funk of Merrill Garbus's genius musicianship soars through the

album. But choruses like "I use my white woman's voice to tell stories of travels with African men" and "I want to be a woman if it means not being human" pull the LP into stark current relevance. While these references might age poorly, for the moment Tune-Yards's latest is an absolute must-listen. Tommy Smith



OF MONTREAL
White Relic/
Irrealis Mood
(Polyvinyl Records)

Of Montreal are back with their boldest statement to date, conceptualizing the "death of the toxic White Identity" plaguing America. Like the album name, each "double-song" is a pair of titles for an innovative two-in-one effect, both musically and lyrically. "If You Talk to Symbol/Hostility Voyeur"

traverses many a soundscape, as Prince-like beats swirl into experimental jazz. "Plateau Phase/No Careerism No Corruption" channels Barnes's best David Bowie-as-spacealien sensibility, while "Soft Music/Juno Portraits of the Jovian Sky" delivers on its prose promise with a colorful crescendo. Mark Miller

#### **BOOK** RECOMMENDATIONS



DANGEROUS MAN IN AMERICA

THE MOST

Bill Minutaglio & Steven L. Davis In 1970, charismatic psychedelic advocate
Tim Leary was serving a
10-year sentence, ostensibly for possession of two joints, but in reality it was because the establishment feared that the counterculture was prevailing in the struggle for America's future, and Leary had to be silenced. After

breaking out of prison with the aid of the revolutionary Weather Underground, Leary led the authorities on a two-year manhunt, and the authors have written a thrilling adventure story full of utopian ideals, hairraising near-misses, trippy scenes and heartbreaking deceit. Michael Simmons

#### **VIDEO GAME** RECOMMENDATIONS



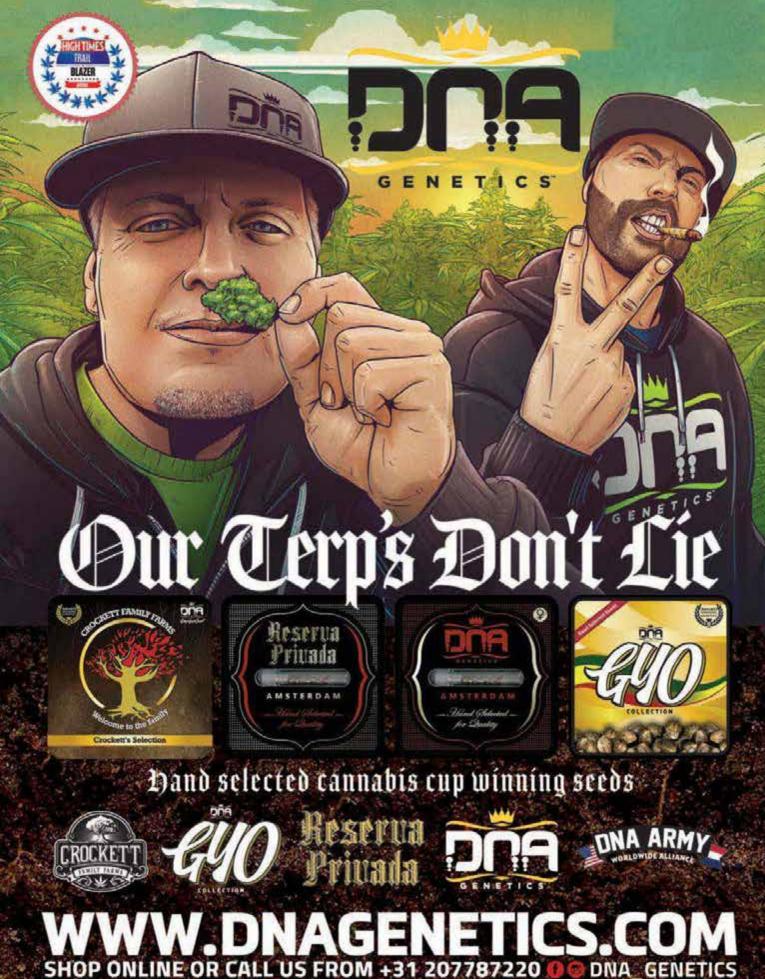
SUPER MARIO ODYSSEY

(Available on the Nintendo Switch) While the countless spinoffs can be hit-or-miss, the main Mario games always offer a special kind of magic that only Nintendo can capture. The same can be said for *Super Mario Odyssey*.

First things first: The portability the Nintendo Switch offers is incredible. Mario isn't locked to your TV and you aren't getting a "mobile" Mario experience—Mario travels with you and you're getting the real thing.

Odyssey finds Mario, Peach, Bowser, Yoshi and the rest of the gang looking the best they ever have, with crisp textures and beautiful weather and environment effects. That makes exploring the new worlds that much more enjoyable, particularly New Donk City, a not-so-subtle reference to the hustle and bustle of NYC. The more than 900 collectible moons mean you'll explore every inch of these worlds, but the pure magic and joy of Mario never fades.

Super Mario Odyssey is exactly as great as you think it is. And, along with The Legend of Zelda: Breath of the Wild, SMO is a great case study on why the Switch is a must-have. The love crafted into this game is evident with every jump and spin, and we're lucky the folks at Nintendo invited us to enjoy it with them. Casey Holiday



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### **KEEPING AN EYE ON CANADA**

WITH THE ADUIT-USE MARKET COMING ONLINE IN THE GREAT WHITE NORTH, BUSINESSES JOSTLE FOR POSITION.

J.J. McCoy is Senior Managing Editor for New Frontier Data



PRINGTIME IS A traditional season for graduations and coming-out parties, and like a debutante planning the event to the nth degree, Canada's cannabis industry is maturing into adulthood even as it prepares for the July 1 cotillion of its legalized adultuse market. Still, deciding on a motif for that first dance toward any financial blossoming is expensive, and not without the considerable risk of missteps that could spoil the scene altogether.

As Canada's cannabis players have been preparing for the market debut, economists and market experts predicted that its licensed producers (LPs) and affiliated companies would be looking toward mergers and acquisitions to scale up and stave off competition, knowing how the speculative promise of billions of dollars would inexorably draw the attention of bigger players and more competition. While the Canadian cannabis sector offers vast opportunity, players must also navigate an uncertain operating landscape to challenge even the most savvy and experienced entrepreneurs.

Many of the rules and standards to govern the nationwide marketplace are even now still being crafted and finalized. The capacity to meet consumer demand remains a critical unknown.

Meanwhile, the respective maturity levels of LPs differ dramatically. While some are sufficiently sanguine to operate as developed organizations, many others are giddy start-ups that can bring technical capabilities to the table yet remain operationally underdeveloped in the main.

Being able to scale production to meet anticipated demand will be key. LPs are struggling to raise sufficient capital to support the costs of increased production and enhanced operations, without compromising margins while meeting and maintaining compliance to regulatory standards.

What to look for as things get jumping? Canada marks the first among the G20 countries to fully legalize cannabis for adult use, in addition to opening



WHILE THE CANADIAN CANNABIS SECTOR OFFERS VAST OPPORTUNITY, PLAYERS MUST ALSO NAVIGATE AN UNCERTAIN OPERATING LANDSCAPE TO CHALLENGE EVEN THE MOST SAVVY AND EXPERIENCED ENTREPRENEURS.

sales and distribution channels to both domestic and international markets. It looks to seize upon a historic opportunity to establish itself as the early global leader in the cannabis space, and to mold the regulatory framework for the industry as it expands global participation and encourages innovation and economic productivity.

On the playlist:

Output of flower and oil is steadily growing as LPs come online. That was to be expected as the adult-use market kicks off. Thus, Canada is trying to bring LPs to market as quickly as possible, but the process for vetting producers is time-consuming. Literally, some million-dollar questions involve whether sufficient supply will be available soon enough, or how well the market can sustain its health despite coughing over supply constraints.

Everyone's hot for oil as its popularity with consumers increases. Given a boost in the medical market, oil consumption has now surpassed flower consumption. Especially once the adult-use market opens, production capacity will need to expand and come online swiftly to support growing demand.

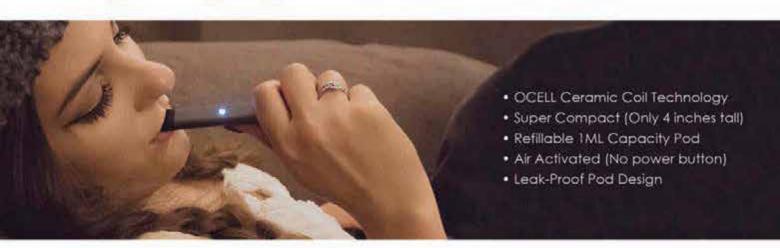
The illicit market will start in the black and thrive in the near term, at least until the regulated market not only meets demand, but also drives prices down to the point where quality, consistency and convenience become differentiators that consumers are happy to pay for (given rational taxation levels).

Embracing technology and innovation will be essential to effectively exploiting lower costs of production, higher yields, productivity enhancements, heightened quality and improved extraction. Building the better mousetrap always improves one's chances for a happy outcome.

Positioning for consolidation and competition can help mitigate the barriers into the cannabis sector. LPs and other companies are very aware that established industries are wellpositioned to enter the market, so those looking to survive must find strength by leveraging existing competencies and assets, whether to defend themselves as viable, independent entities or to catch the eye of established corporate interlopers from the tobacco, pharmaceutical or alcohol segments, which look to poach players and expand into and overwhelm the space. \*



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<b>US Price</b> Index <i>YTD Average</i> : \$315	Eastern Index YTD Average: \$339	
\$321 \$319 \$312 \$310 \$311	\$346 \$341 \$332 \$335 \$339	
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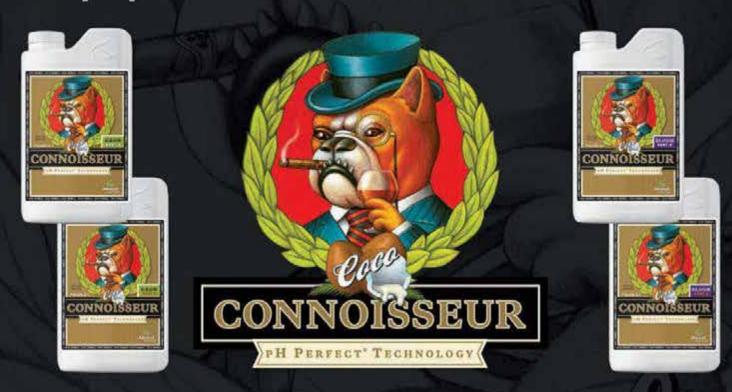
CITY	STRAIN	PRICE
Mobile	Sour Diesel	400
Anchorage	Pink Gorilla	340
Glendale Tucson	Blue Dream Berry White	200 235
San Diego San Jose	Jack Herer Lemon Haze	200 300
Boulder Fort Collins	Thelonious Skunk Bubba White	175 280
Wilmington	Gorilla Glue	200
Miami	Girl Scout Cookies	280
Atlanta	Girl Scout Cookies	420
Idaho Falls	Blueberry Dream	450
Chicago Mundelein	Sour Diesel Mango Kush	280 420
Bloomington	Skywalker	500
Louisville	Girl Scout Cookies	280
Baltimore	Blue Dream	280
Boston Chicopee	Trainwreck Cat Piss	420 450
Ann Arbor Detroit	Blue Dream Gelato	390 360
St. Paul	Bubba Kush	280
Picayune	Pineapple Express	420
Columbia	Green Crack	280
Henderson Sparks	Tahoe Alien Durban Poison	295 200
Albuquerque Carlsbad	Sour Banana Sherbet White Nightmare	335 350
Bridgeton	Girl Scout Cookies	280
New York	Blue Dream	350
Mooresville Shelby	Green Crack Bubba Kush	300 280
Cuyahoga Falls Springfield	Bubblegum Sherbet Lemon Kush	230 420
Oklahoma City	Cali Kush	280
Eugene Klamath Falls	Sour Banana Sherbet Mendo Breath	240 140
Lebanon	Bubba Kush	400
Greenville	Cinderella 99	240
Chattanooga Nashville	Gas Gorilla Glue	275 400
Galveston League City	Blue Dream Bubba Kush	400 420
Bennington	Berry White	400
Bremerton Tacoma	Pineapple Gas Gorilla Glue	230 250
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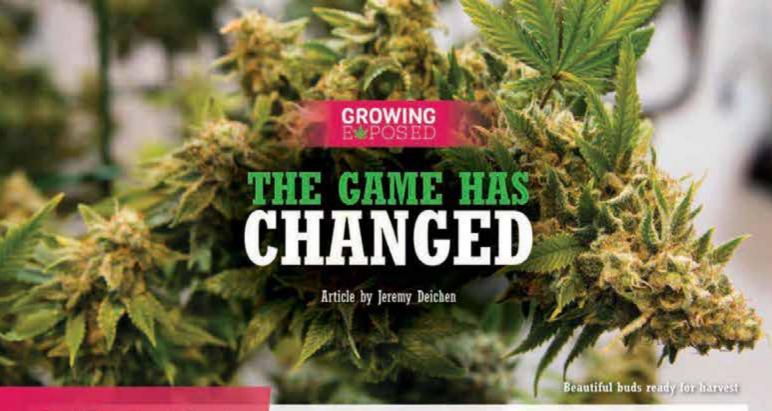
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Growing Exposed, a new video series produced by Jeremy Deichen, has been coined "the MTV Cribs of the marijuana industry" for its exclusive look into the once underground world of North America's gardens. Aside from revealing secrets of industry leaders, David Robinson, author of The Growers' Handbook, lends his expertise to a segment called Teachings of the Garden Sage. You can check out gardens, like the ones that make British Columbia's Kootenay region the Mecca of B.C. bud, on the letest episodes at growingexposed.com,

hen Bryan Johnston began growing cannabls, it was the early '90s. He was using 1000 watt bulbs hung from the ceiling commonly referred to as "Donkey Dick" lights. During this period, British Columbia was becoming infamous for the highest quality bud on the planet and people were calling the province's crops "Beaster". A lot has changed in the 25 years since — including his setup and the base plant food he uses, thanks to Green Planet Nutrients.

An environmentally conscious guy, Bryan says he remembers, back in the day running those 1000 kilowatt bare bulbs. Today, his indoor garden uses a smaller wattage but yields dramatically more per watt than ever before.

### "Everything has changed." The game has changed."

he says. "I'm running doubled-ended P.L. lighting with four Spectrum King 600-watt LED lights and doing a massive cross spectrum of light, running four 315-watt P.L. ceramic metal halides. So I'm totaling just under 4,700 watts and yielding on average, two pounds or more for every 1,000 watts of light."

The most recent change to Bryan's garden wasn't in setup though, but to a new base plant food. Manufactured by Green Planet Nutrients, Dual Fuel is a highly concentrated, two-part formula that provides all the energy plants need without the need for calcium or magnesium additives. It's known for an easy application process which leaves less room for error.

using Green Planet's Hydro Fuel and got fantastic results, so when I went to my local grow shop and got some samples of Dual Fuel about two years ago, it wasn't a stretch to give it a try," Bryan says. "But on some level, any type of switch is a leap of faith as a grower. People who consume my product are used to a level of quality and I can't afford to give them anything less than the best."

Drying buds on the drying rack

Frowing Lemon Haze since 2011, Bryan says this strain takes a little longer to flower than normal but the flavour and sativa experience is well worth it. He finds it easy to grow and the resulting product very consistent in quality. With the switch to Dual Fuel, Bryan says he noticed changes to his plants almost right away.

he switch was really easy and the first noticeable difference was that my plants became way greener than before and they stayed lush green into the later stages of flower. It's also cleaner and I don't have salt residue or buildup. Plus I'm getting better and faster yields, so I'm saving about a week overall on my crop. I've done the math on what it costs to run other brands and not only am I saving money but I'm having better results."

with Dual Fuel, Bryan uses only three additives: Green Planet's Massive Bloom Formulation, Finisher, and Terpinator. He says when he's tested plants grown with the additives versus ones without, he's noticed way more cannabinoids.

### GROWING EMPOSED

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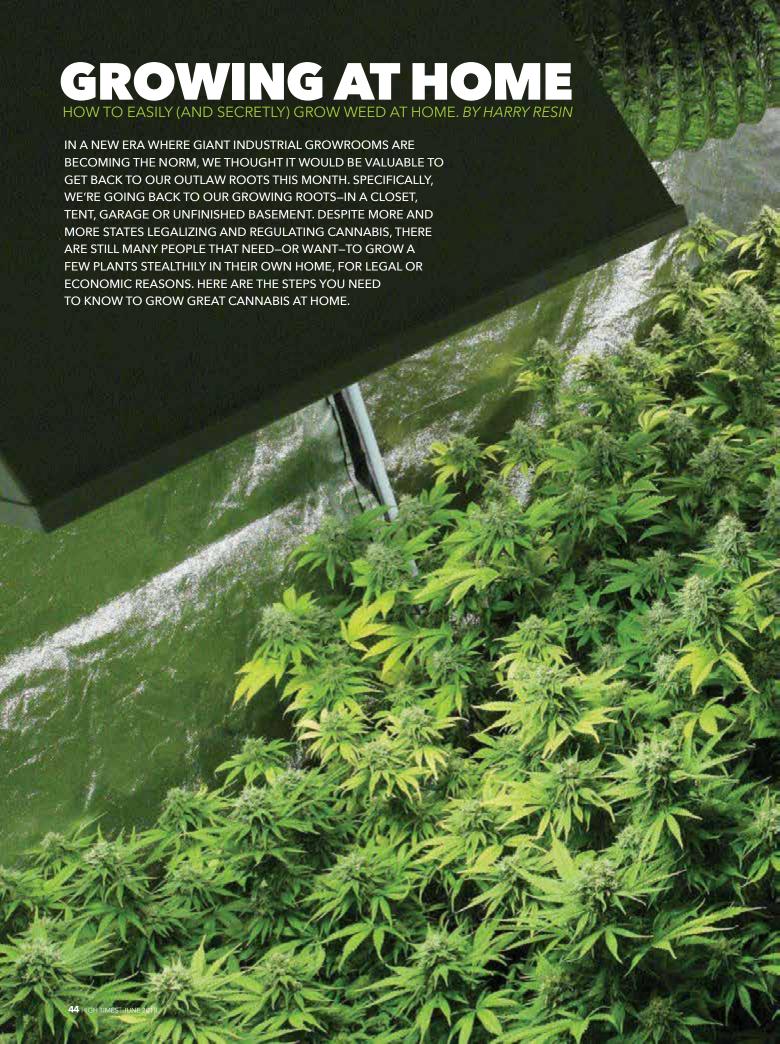


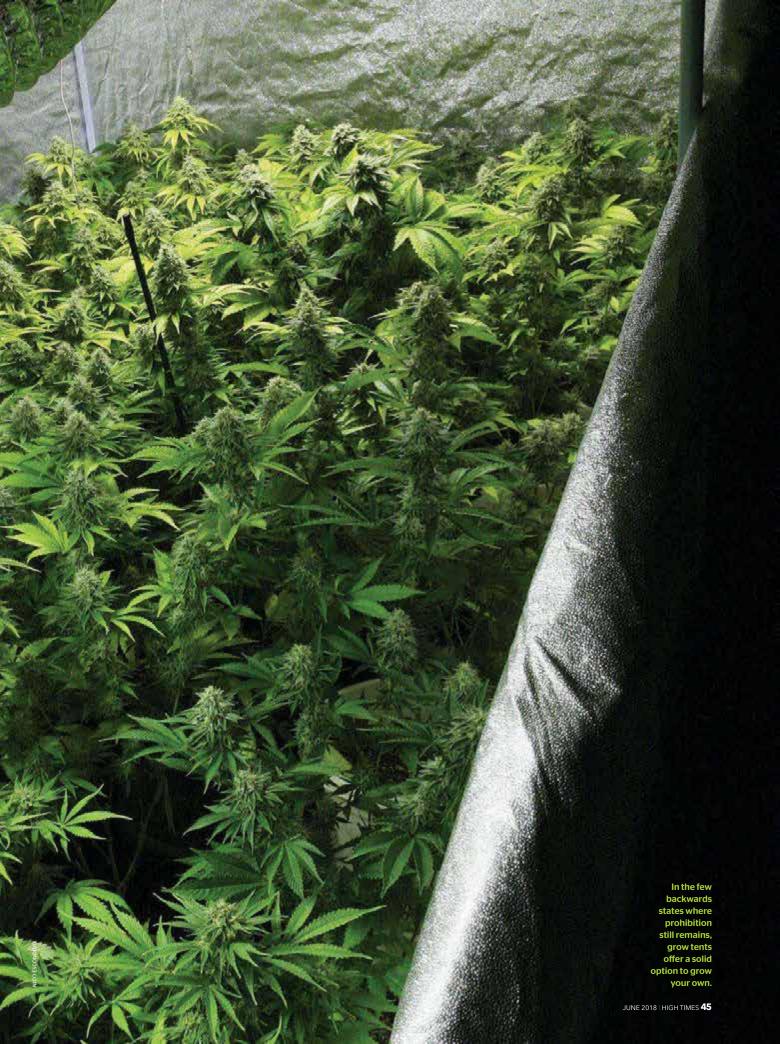


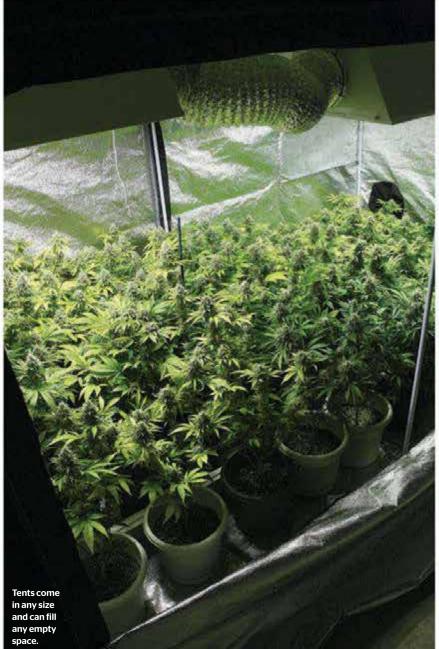
















## "MAKE SURE THE AMOUNT OF AIR THE FAN MOVES INTO THE TENT IS ABOUT A THIRD OF THE AMOUNT IT MOVES OUT. THIS WAY YOU WILL ACHIEVE THE RIGHT NEGATIVE PRESSURE."

### **LOCATE A SPACE**

The first step is to find a space that has good airflow. This is usually a room with a window or exhaust to the outside. If you are growing in a warm climate, you will want to use a space with built-in air conditioning, as this will keep your plants cool during the warmer days. The logic behind airflow is to replace the warm air in the space with cooler air, as cannabis plants tend to like a temperature around 76°F with humidity at around 60%. It is important that you have fans both pulling warm air out of the space and drawing cooler air in. Typically, you want to have negative pressure, which creates optimal airflow. A sign

that you have negative pressure would be when you close a grow tent and the sides buckle slightly inward. (For our purposes here, we will often use the example of a grow tent to describe the garden space. Not only are grow tents relatively cheap these days, but they also come in every size imaginable to fit any space in a house. On top of that, grow tents can be sealed, making it easy to control light and atmospheric conditions, and they come with nooks, hooks and ports for garden equipment such as fans, filters and lighting.)

When calculating what kind of exhaust fans to use, make sure that the amount of cubic feet of air they move into the tent is about a third of the amount they move out of the tent. This way you will achieve the right negative pressure.

Most grows these days make use of fans, which are great for moving air in and out of the garden, but this will never make up for atmospheric pressure, which occurs in nature in the form of high-and low-pressure weather systems. This pressure is vital for the plants to breathe properly. Plants breathe through respiration, and this pressure makes it easier for the leaves to transpire. Even in a small tent or growroom, this principle is important as it will give your plants the optimum environment in which to grow.

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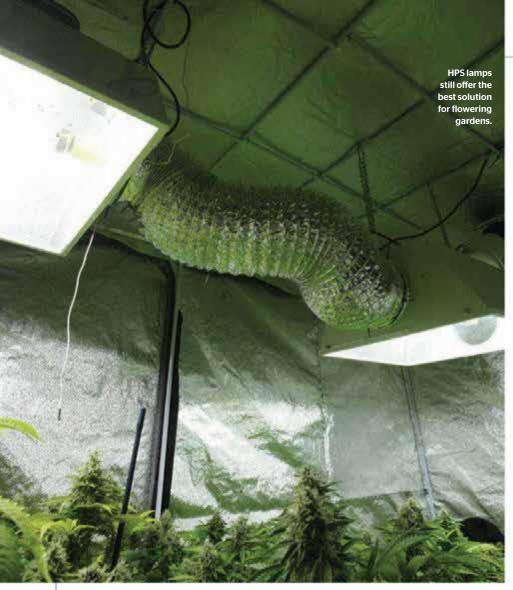
- all ceramic kiln, gentle heating element
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### **GARDEN LIGHTING**

Next, consider lighting. If temperature and space are less of an issue, it is recommended that growers use standard high-pressure sodium (HPS) lighting. Traditionally, HPS lights come in the form of a hood and bulb connected to a ballast. Nowadays, lights like Gavita-brand DE fixtures have a ballast attached. Based on how the light is shaped, you will need at least 4-5 feet of height from the top of your canopy to the ceiling to have enough room for the ballast and light to fit. Otherwise, you could risk burning your plants. Also, be sure to use the appropriate wattage depending on the size of your space. Usually, a 5' x 5' tent can handle a 600-watt light.

Another option would be to use LED lights. Modern advances in LED technology have helped them catch up with their HPS counterparts. However, don't expect your yields to increase with the use of an LED lamp as the PAR (photosynthetically active radiation) from an LED lamp is generally much less than that from an HPS light (PAR is the radiation given off

by the lights that plants can absorb and use during photosynthesis). Nonetheless, we've seen buds produced under the newest LEDs, and they've finished with a firm, hard structure. Usually, the benefit to the home grower is that LEDs use less power and give off less heat, making it easier (and less expensive) to cool your tent or small room. However, the newer LED models that compete with HPS or metal-halide (MH) lamps often lose these advantages, adding more diodes that create more heat and pulling a lot more power to the lamps in order to achieve competitive light output.

LEDs can produce nice trichome coverage, and the cannabinoid and terpene levels produced have been tested at comparable values to HPS lighting. These lights can also be hung closer to the plants in case height requirements are an issue, and they also offer a longer life cycle in terms of bulb replacement. It should be noted, though, that the best LED lamps on the market today are much more expensive than their MH and HPS counterparts.

### **SYSTEM & MEDIUM TYPE**

You next need to decide what medium to use and how to grow your plants. Unless you are an experienced cultivator, using potting soil and a light organic nutrient solution would be the best and most forgiving choice.

Make sure that the soil is well aerated. This means finding a brand that has a decent amount of perlite in it. Perlite opens up the dirt, allowing more air to pass to the roots and preventing it from forming a muddy pool. Using cloth pots is also recommended as these pots are very breathable and come in a variety of sizes. Depending on veg time, you can use up to a 2- or a 5-gallon pot. If plant count is an issue, stick to a long veg time and grow a bigger plant. This way, when it comes time to flower, you will end up with a much bigger yield.

Nutrients like Mother Earth Tea or Iguana Juice Bloom from Advanced Nutrients are simple organic nutrients that work well and give your finished flower a great taste. The reason for choosing a simple medium and nutrient plan is that it's hard to overfeed and the medium acts as a buffer, so it will be easier to maintain the pH of the water. Potting soil is one of the easiest mediums to use because it's so forgiving. The biggest issue that you might have is over- or under-watering. Make sure to feel the weight of your plants both when they're thirsty and when they're full of water so you can get a sense for how much they are drinking. This will ensure that you don't over-water.

When in flower, cannabis plants prefer a pH in the range of 5.8-6.5, and they don't like to be overfed. The best advice is to keep it simple. This also goes for nutrients. It's always best to start off with half the recommended dose and build your way up. Make sure to pay attention to your plants in the process. If the leaves begin turning yellow, then your plants are experiencing a burn and you will need to lower the amount of nutrients you are using. Always be on the safe side and remember the motto: Less is more.

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### **GENETICS, SEEDS & CLONES**

Now it's time to choose what genetics or cultivars to use. More often than not, clones are more readily available, especially in legal states where dispensaries are allowed to sell them. However, this doesn't mean that clones are the best choice. As was discovered recently through several news stories and secret-shopper lab tests in California, many pesticides are systemic and are passed from mother plants to clones. This means that unbeknownst to you, the final buds you end up with might be contaminated with unhealthy pesticides.

Seeds are always a better choice in that respect. Clones can also bring pathogens into a grow, as that's often how powdery mildew (PM) or spider mites enter a clean garden. Even if your clones look clean, PM is systemic and can be carried from the mother plant. With the right environment, it could explode in your garden and leave your head stash ruined. In a pinch, choose feminized seeds as they will provide you with the most females. However, be warned that many feminized seeds will be hermaphrodites, meaning that there's a good chance of finding trace amounts of male pollen and eventually a few seeds. Watch your plants closely and look for any balls forming right at the points where the stems merge with the central stock of the plant. Remove those plants before they release their pollen.

We also recommended that you use a simplified integrated pest management (IPM) protocol. Traditionally, oils have worked very well at combating various garden pests. Specifically, use neem oil and fish oil, in the form of a product called Organocide 3-in-1 Garden Spray. At low doses, as long as you spray in the dark, you will be fine. However, with an infestation and at higher doses you will want to rinse the oils off your plants after spraying. This might seem counterproductive, but the oils will still do their work and at the same time you won't clog the stomata of the plant. Green Clean is another popular product that can work well against pathogens and doesn't require a hazmat suit to spray. Small pump-action sprayers are available at most grow shops and Home Depot. For the more adventurous cultivators, use large paint sprayers in the garden as they really wash the plants better than the handheld units. However, this could be overkill for a small 5-plant tent garden.



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### **HARVEST: DRYING, CURING & BEYOND**

The final step, once you have grown out your plants, is the drying process. Using the same tent you grew in, cut down your plants and hang them upside down. Wait 5 to 7 days, checking the moisture daily. The ideal temperature should be around

75°F with humidity around 60%.

When the stems begin to snap, it's time to trim up your head stash. It's best to trim your buds over a screen, which will allow you to capture the trichome heads. This is known as dry sift hash or kief, and it is an excellent reward for the grower. There are many different types of screens available on the market, including a product called the Trim Bin by Harvest More, which has a screen built in on the bottom and is perfect for collecting hash.

Once your buds are trimmed, you should then store them in a cool, dark place in glass mason jars. It's best to burp these jars daily, which means opening them up for a few minutes at a time. Once you've done this for a few days, your buds should be at an ideal moisture level and ready to smoke.



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### THE FUTURE OF HOME GROWING

It is always interesting to look ahead and see what the future holds for the home grower. Based on how technology has developed, specifically in the form of selfcontained, app-controlled growrooms, the future is here. There are even small tabletop units being sold at stores like Ikea for small herb gardens. These boxes could be the future for home growers and hobbyists as they democratize the process of growing cannabis, putting it within the reach of the average person.

A new unit geared specifically to discreet, indoor home cultivation has come on the market. The Cloudponics GroBox is 24 inches deep, 31 inches wide and 6 feet tall. It fits seamlessly into a living room or kitchen and can hold 1-6 plants. The heart of the unit is an advanced aeroponics system that is controlled by a computer, which monitors the temperature, humidity and nutrients and keeps the light schedule. This computer, in turn, is connected via an app to your phone.

This connectivity gives even a new grower a leg up as the environment is controlled automatically. Normally, buds coming out of such boxes have been disappointing, but in our test case it appears improvements have aided in turning the corner. As a result of the dosing computer, the hydroponic setup, airflow and lighting, the buds actually had a solid structure to them. The flowers were produced by a grower with limited experience, which goes to show that with the right setup, a proper hydroponic system with exacting environmental controls can really produce a quality harvest. Newer grow boxes like these will take a lot of guesswork out of growing moving forward. \*





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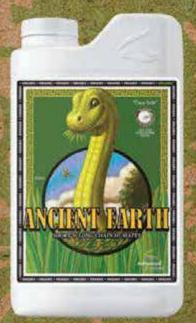


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### SPRING PLANTING GUIDE

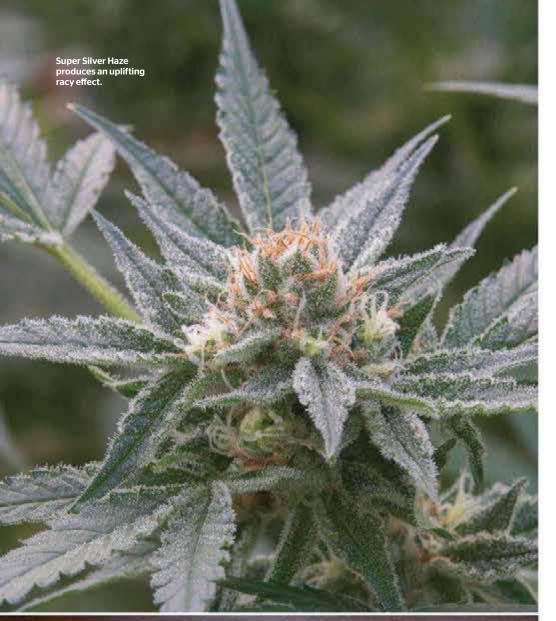
AS WINTER FADES, POT FARMERS TURN THEIR ATTENTION TO STARTING THEIR NEXT GARDENS. FROM POPPING SEEDS AND ROOTING CLONES TO SEXING PLANTS AND PROVIDING NUTRIENTS, WE REVEAL THE KEYS TO GETTING YOUR CULTIVATION STARTED OFF RIGHT.

STORY & PHOTOS BY STINKBUD

### **SPRING FORWARD**

Don't you just love the first days of spring? While the warm days and sunshine are a wake-up call for nature, they're also an alarm clock for that rare species *Homo canna groweraeus*. This unique creature loves growing huge cannabis flowers and has been known to actually "smoke" them after harvest. Nature can be weird! Follow us on a guided tour with this strange beast as he shows us his version of spring fever.

We all have to start somewhere! It's always a little overwhelming at first, so take a deep breath and roll a phatty, and it will all make sense in the end. Genetics are your first concern. A successful grow starts with great genes. Every strain is a little different, so it may take a while to find the perfect fit for you and your room. The good news is that the characteristics of most popular strains are well-known, so it's not hard finding something you'll like.





### TESTING, FOUR, TWO, ZERO

Cannabinoid and terpene tests are becoming common, but these don't tell the whole story. There is a big difference between the way Durban Poison makes you feel versus something like Obama Kush. Even if they test out at the same THC percentage, the effects are night and day! A pure sativa like Durban Poison makes you want to clean the house. In contrast, a heavy indica like Obama Kush creates a symbiotic relationship between your ass and the couch.

Basically, you want a nice selection of strains. Find yourself a strong *indica* because that pizza ain't going to eat itself. A balanced hybrid is wonderful for a flight through the woods, and it's hard to beat a good *sativa* like Super Silver Haze when you need to contemplate when time began. Every strain is different, so don't be afraid to mix it up.

### **SEEDS OR CLONES**

Choosing between clones or seeds depends a lot on where you live. If your state laws deny your right to grow, then your only choice is to buy seeds online or hit up one of your grower buddies for clones. I've had over 10 years of success buying from the seed banks advertised in *High Times* magazine. Many of the companies offer freebies, and a couple of times those have ended up being my favorites out of the whole batch.

If you live in a state that allows home grows, make sure you review the local laws first. In Oregon, we're allowed four plants per property. They don't care how big, just how many. Clones and seeds are available at many local dispensaries, so all it takes is a quick internet search to find exactly what you're looking for. It's quite amazing when you think about it!

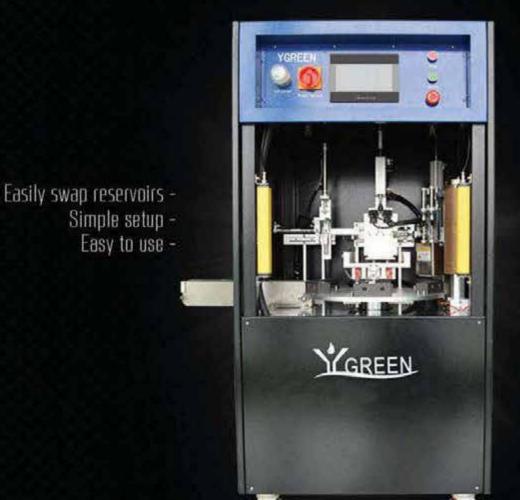
### **BOYS AND GIRLS**

One of the main advantages of using clones is knowing they're female.

Male plants don't produce buds, and they're likely to seed your flowers and take up just as much time and space. Feminized seeds are a great option and take out the guesswork when sexing. Many growers swear by good old-fashion boy/girl crosses. If you start early, you'll have plenty of time to sex the plants.



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### **HOW DO YOU SEX A PLANT?**

Take cuttings as soon as the plant has a spare branch. Right after the clones pop roots, set the lights to 12 hours on/off. Within a week or two, either male or female flowers will form. If you aren't going to use the pollen to breed new seeds, you can just toss both the male adults and clones out. The female clones can then be regenerated back to veg by adjusting your lights back to 18 hours on, 6 hours off.

### PREPARING THE SOIL

Now that we have the genetics figured out, it's time to start thinking about amending the soil. There are a lot of great growing amendments available, but it's hard to beat good old-fashioned compost. You can purchase different types, but it's better if you make it with your own local input. To make compost yourself, you'll need to start about a year before you need it by mixing up some old grass clippings, apple cores

and anything else that is "green" with an equal amount of the "brown" carbon from leaves, sticks or straw so that the soil-food web can do its job making compost and you can have a key ingredient to grow buds that taste amazing.

If you're growing using a no-till method, broadcast the compost evenly over the beds and gently spread it out, being careful not to cause compaction around the root zone, which will damage the beneficial microbes living in the soil—typically, 1 to 2 inches of compost is good for top dressing. Some growers prefer to make nutrient-rich teas from the compost and feed the soil with the mixture. It's a simple concept: Feed the soil and let the soil feed the plants.

If you can't make your own compost, shop around for the best quality you can find. Your local hydro shop should be able to hook you up with the right stuff. Be careful buying from sketchy sources. The few dollars you save won't make up for sick and dying plants.



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### POTS FOR POT

Many growers find that containers are a great option. Your choice of container depends on the final size of your plants. If you plan on 10-foot monsters, you'll need planters that can handle roots just as big. Giant plants may need up to 400-gallon pots! Figure out how much space you have and work backward. If you're growing small plants on the back porch, 20-gallon containers may be more than enough. The easiest way to fill your containers is to find a good source for soil and have it delivered. If you don't need much soil, your local hydro shop or garden center can take care of you. Many times, the local shop will give you the "bro deal" if you shop there often enoughand it helps the local economy.

### START EARLY

The sooner you start, the bigger your plants will be at harvest—it's just that simple. A basic indoor area is all you need to get the ball rolling. A small room or basement kept around 78°F and at 50% humidity is perfect. If you're starting from clones, transplant them into 3-gallon containers. Many growers prefer fluorescent lights at this stage of the vegetative cycle, kept at 18 hours on and 6 hours off.

If you're starting from seed, it's hard to beat the old-school paper-towel method. The first thing you want to do is mark the different strains on paper towels with a waterproof marker. That way, you won't mix up the strains later. Put layers of seeds/paper towels in plastic containers and soak them with lukewarm water. Drain off any excess water and put the containers in a warm, dark place. Within a day or two, you should see little roots popping out from the seeds.

Now it's time to give your new babies a home. Take 4-inch containers and fill them with soil. Moisten the soil with water and let it sit for a minute, ensuring that the soil is fully saturated with water and doesn't contain dry pockets. Create a label and write the name of the strain using a waterproof marker and stick it in the soil. Grab a small bamboo skewer and poke a hole in the soil about a quarterinch deep. Carefully take the seed and place it in the hole with the root facing down. You don't want to go very deep, just enough to cover the seed shell. Brush a little soil over the hole and you are good to go. You should see a new sprout within a couple of days. It doesn't hurt to have the temps in the low 80s with the humidity at 50% or more at this stage.

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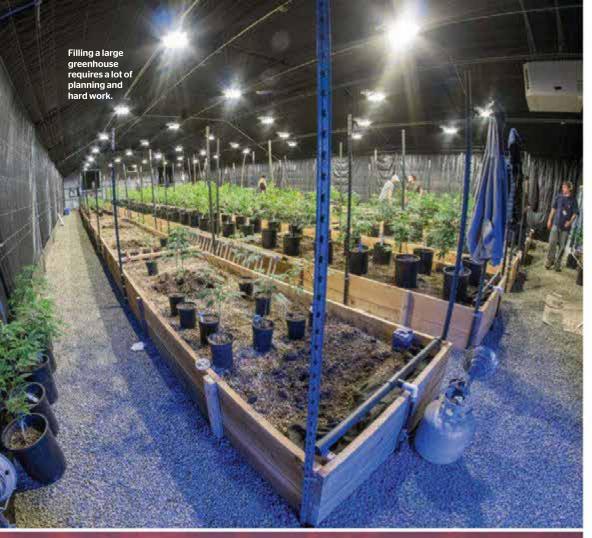
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# A light-supplemented/light-deprivation greenhouse waking with the sunrise.

### THE VEG STAGE

Within a couple of weeks, you should see roots sticking out of the bottom of the containers. This is the sign that it's time to transplant into larger containers. If you plan on vegging your plants a long time, it's best to start with larger containers so you don't have to keep transplanting them. Don't forget that at some point your plants will need to be moved outdoors or into a greenhouse. A good rule of thumb for container size is 1 gallon of soil per week of veg time. Big pots can get heavy, so don't be afraid to ask for help!

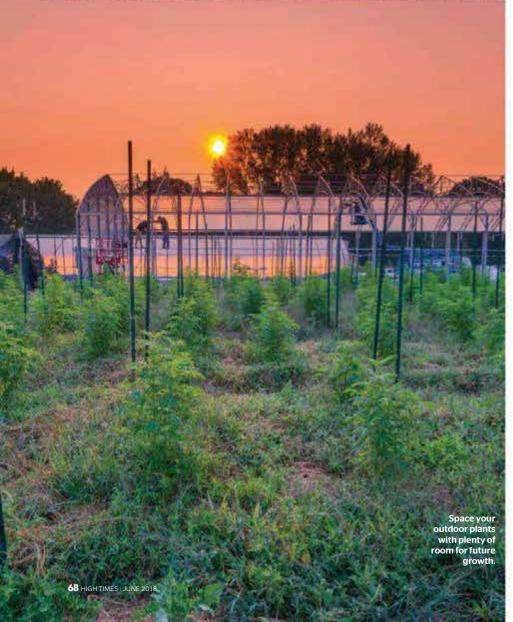
You can continue to veg your plants under 18 hours of fluorescent lights, but LED and high-pressure sodium (HPS) lights are also an option. I prefer to use metal halide (MH) bulbs during veg, as I find it reduces stretching. Most modern light setups will allow you to switch from MH to HPS bulbs, so it's possible to have the best of both worlds.

### THE GREENHOUSE OPTION

A simple greenhouse can completely change the way you grow and easily pay for itself with savings in electrical costs. With a lightdeprivation tarp and extra lighting, you can even grow year-round. The concept behind a light-dep, lightassist greenhouse is the utilization of extra lighting and a light-blocking tarp to help control the environment. The lights are kept on during the short winter months, allowing the plants to stay in veg, while the tarp blocks out natural sunlight to control the flowering cycle. This allows flowering early in the season and harvesting before the wet, rainy season begins.







### LIGHT POLLUTION

Another advantage of a light-dep tarp is the reduction of light pollution. Yes, that's right, light is not always right. What may be good for cannabis plants may harm the natural light cycle of native plants. No one likes it when someone turns on the lights while you're trying to sleep. Don't be that bad roommate.

### THE NEED TO FEED

Whether you're vegging your plants indoors or in a greenhouse, they are going to get hungry. Aerated compost tea is one of the best solutions to feed not only the plants, but also the soil they grow in. The compost tea can be sprayed over the beds and also be used as a foliar feed for the leaves.

The most convenient nutrient option is a trip down to your local hydroponic store. There, you'll find a vast assortment of everything from organic teas to moon dust. I recommend sticking with organic nutrients for the healthiest products—and, truth be told, organically grown buds taste better. Every nutrient brand has a different formula, but the good news is that most of the popular brands have been tested extensively. All you need to do is follow the directions on the label.

Most of the popular nutrient formulas require a blend of different ingredients. All the major nutrient brands have websites with detailed information including formulas and schedules. You may find yourself adjusting the amounts based on the quality of your soil and the rate of plant growth.

### TIME TO MOVE

At some point, the weather will warm up enough to move your plants outdoors. If you do an internet search, you should be able to find the last spring frost date. This is the day it's safe to move your indoor plants outdoors. However, it's important to harden your plants for a few days before placing them in full sunlight. Think of it like going on vacation to Hawaii and not wearing any sunscreen. Things could get ugly! The same thing happens with plants. They need time to develop pigment to shield themselves from damaging UV rays. Yes, that's right—plants need a suntan before they go outside, just like us!

One of the most ingenious hardening methods I've ever seen is done by placing posts along the flower beds and setting lattice fencing on top. Throughout the day, as the sun changes position in the sky, the lattice will alternately provide sun and shade, so the plants never burn. Within a few days, the lattice can be removed.

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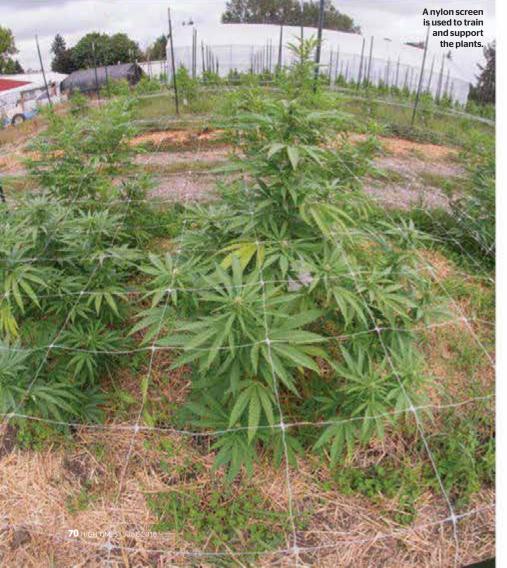
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### TRAINING, CROPPING AND LOLLIPOPPING

As your plants mature, you'll want to start training the way they grow. The "screen of green" (ScrOG) technique of growing has become very popular over the last few years. The concept is to manage the bud sites by using a screen to train the branches.

You start by sinking metal or wooden posts into the ground evenly along the sides of your beds or planters. A layer of nylon screen is placed over the posts right over the top of the canopy. As the plants grow, branches are bent down under the screen and forced to cover the entire grow area. Any holes are filled with side branches until a plush canopy of cannabis fills every inch of space. As the plants continue to grow, multiple layers are placed above the plants to help support the future giant colas.

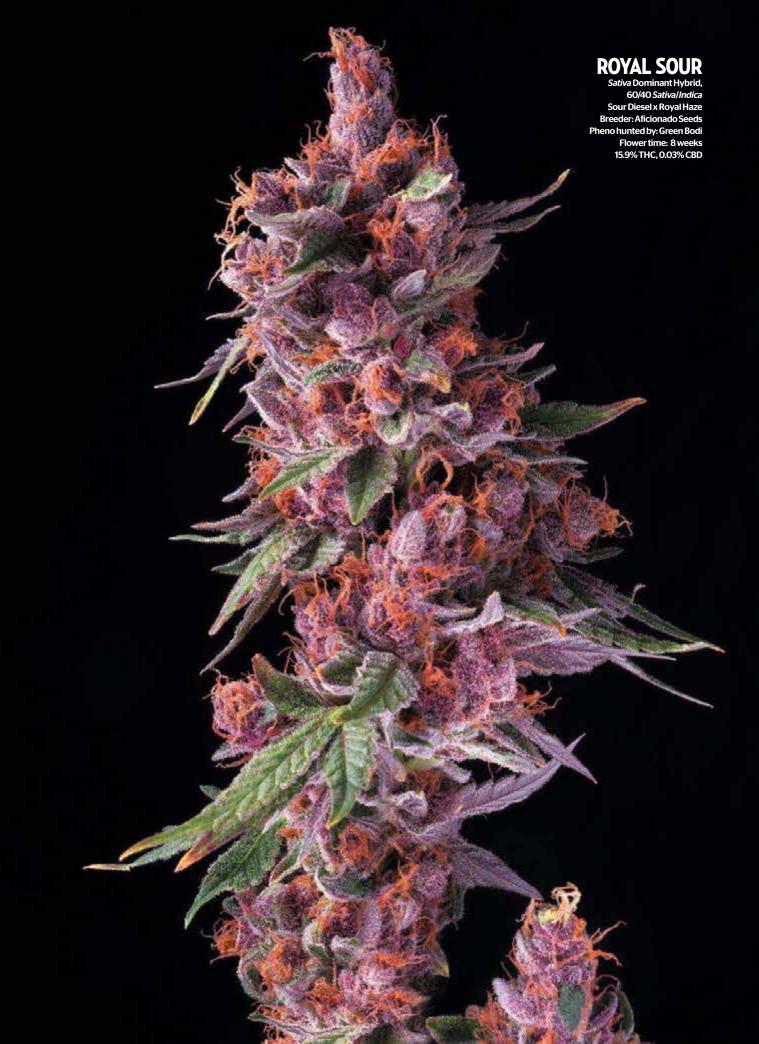
As the plants grow taller, it helps to remove any lower leaves and small branches. Basically, if the leaves and shoots aren't getting any light, pull them. This will help the plant save energy with the added benefit of increasing airflow. It's called "lollipopping," after the way the plants end up looking when they're done—like big lollipops!

### **IPM**

Integrated pest management is a concept based on managing pests instead of eradicating them. A combination of organic-based sprays and beneficials (harmless organisms that feed on pests) are used instead of harmful pesticides. During the vegetative stage, spraying with a combination of neem oil and Dr. Bronner's peppermint soap will help keep the pests at bay. An alternate spray of Organocide 3-in-1 will round things out. Make sure you water the plants well a few hours before you spray, and always turn off the lights while spraying. Wait until your plants are dry before turning the lights on again. If spraying outdoors, do so early in the morning or late in the evening so that your plants are not burned. Safety is always critical, so make sure you wear a proper mask, goggles and anything else needed to stay healthy. Remember that "the label is the law," so always follow the instructions for any pesticides you choose to use.

### GETTING READY FOR FLOWERING

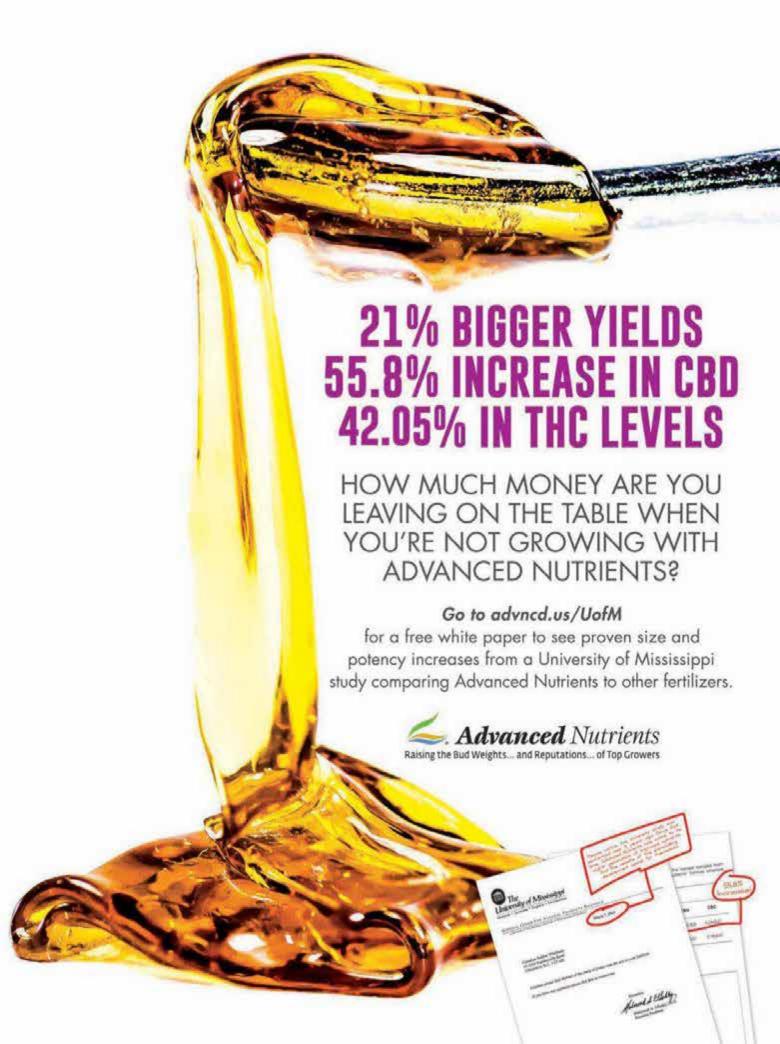
All that's needed now is basic maintenance, and before long you'll have trees growing in your backyard! If you're growing in a light-dep greenhouse, you can flip the timer to 12/12 whenever you want. If you're growing outdoors, your plants will naturally start to flower in the late summer months. As soon as the plants start to flower, your routine will need to change. The nutrients change ratios, and you will no longer be able to spray your plants. Good luck and keep growing, and you might even find that the rare species of Homo canna groweraeus is actually yourself! \*











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And to everything we can accomplish, together.









**SEVENTEEN YEARS AFTER** THE RELEASE OF THE CULT HIT *SUPER TROOPERS*, BROKEN LIZARD IS BACK IN SHADES AND MUSTACHES FOR THE COMEDY TROUPE'S HIGHLY ANTICIPATED SEQUEL, *SUPER TROOPERS 2*, WHICH HITS THEATERS ON APRIL 20. BROKEN LIZARD FIRST GOT TOGETHER WHEN THE MEMBERS WERE ATTENDING COLGATE UNIVERSITY IN 1990, AND THEY'VE BEEN PERFORMING TOGETHER EVER SINCE—IN LIVE STAGE SHOWS AS WELL AS FILMS LIKE *CLUB DREAD* AND *BEERFEST*. IN HONOR OF THE UPCOMING RELEASE OF *SUPER TROOPERS 2*, JAY CHANDRASEKHAR, KEVIN HEFFERNAN, STEVE LEMME, PAUL SOTER AND ERIK STOLHANSKE SAT DOWN WITH *HIGH TIMES* TO DISCUSS MAKING MOVIES, MARIJUANA, THE MEOW GAME AND MUCH MORE.





### So the long-awaited *Super Troopers 2* comes out on 4/20...

KH: It's now considered like a holiday, right?

ES: International holiday, yeah.

PS: Now we're giving you something to do on that holiday, which is kind of a cool thing.

JC: Because all the best holidays have an activity.

KH: Christmas activity, Halloween activity, Easter activity.

SL: 4/20 has an activity now.

### What can we expect to see in the new film?

JC: Well, we're all in it, the five of us. that's for sure.

PS: Brian Cox.

KH: A bunch of people came back. Lynda Carter's back.

JC: The mustaches are all about double the size.

SL: There's extra mustaches.

KH: There's 20 percent more mustache, and then there are other characters with mustaches as well.

SL: There's a lot of new players, too, like Rob Lowe's in the movie, which is great.

KH: And Mounties. We have Mounties this time. Will Sasso and Tyler Labine and Hayes MacArthur.

ES: And live animals.

### We read that the bear fucker makes a reappearance?

ES: A twist. A twist on the bear fucker.

### How did you develop your roles starting out as a comedy troupe? How did Kevin become the villain? How did Jay become the director?

JC: Back when we did sketch shows at Colgate, they weren't cast until several drafts into all of the sketches, so that nobody wrote for themselves, because it's sort of the natural thing you would do. So you're writing on every sketch because you're like, "I don't know, I might be in that one." That's the approach we took with this film originally. We didn't cast it until, like, draft 20 of 35. So you had to write jokes for every character. There was a point where I was going to play Farva and you [Kevin] were going to play Thorny.

PS: We did a table read where everyone played different characters, right?

ES: Yeah, and everyone took a shot.

SL: Although I didn't try to read for the part of Farva, because I was going after [Kevin]. When you read it, I was like, "There's no point."

PS: He's the biggest asshole.

ES: That's our Farva.

PS: We could do, like, a YouTube thing where we took turns recreating scenes with each of us getting to be Farva.

### You should do it for the closing credits of your next film. KH: We can just put it in Super Troopers 3.

JC: It's funny, because that's also a good cold open for the movie. Like, one of the guys as Farva, and then he wakes up in a cold sweat.

## It's interesting to hear about a table read, because there are so many iconic lines in *Super Troopers*. Obviously, it was scripted, but a lot of it must have been improvised.

JC: The first film only had about seven or eight improvised lines.

SL: We wrote 35 drafts, crafted every single thing. Occasionally we needed some filler.

KH: The budget was so tight. We got three takes max for everything.





### "THE SHOOTING RANGE THAT WE WERE FILMING WAS THE SHOOTING RANGE FOR THE FISHKILL MAXIMUM SECURITY PRISON... AND THE WING THAT WAS LOOKING OUT OVER THE SHOOTING RANGE WAS THE WING FOR THE WORST OF THE WORST."

PS: We couldn't fuck up, so we had to get what we had written. But improvs did make it in.

JC: Not many.

PS: Well, we rehearsed a lot. We would rehearse a lot to be ready to go, and improvs would come out in the rehearsal and then they'd make it into the script.

JC: The style of the film somehow makes people think that everybody was sort of making it up on the spot.

#### Absolutely.

JC: Which is wildly untrue. But in the second movie, we improvised, probably, 20 percent?

### Do you have a most memorable day filming, for the original or the new one?

KH: The first one, I feel like there were several, like the prison yard was very memorable.

ES: Yeah, the bulletproof jockstrap.

SL: The shooting range that we were filming was the shooting range for the Fishkill Maximum Security Prison, which means that they're bad criminals. And the wing that was looking out over the shooting range was the wing for the worst of the worst.

JC: The ones who'd killed the most fish.

SL: Yeah. [laughs] And then killed other prisoners in the prison. All they knew was that there was a cop taking his clothes off and then getting shot at by other cops. These guys were shouting the filthiest stuff at me all day

PS: And you were in a kimono so you wouldn't get sunburned, and you had an umbrella over your head.

SL: Yeah, so there was a red kimono. There was a little parasoltype thing that somebody was holding over me, right? Because I'm in a movie.

PS: But maybe it's really because

they thought the prisoners were going to throw their feces at you and piss on you.

JC: We weren't that close.

PS: I know, but they could try. You know, what else are they going to do?

SL: But when I took off the umbrella and took off the robe and was naked, there was like a fucking cheer that went up from the prison.

JC: I also remember when we shot the powdered-sugar scene, because we were with this guy Daniel von Bargen, who played the local police chief. He's just a serious actor, and so you're putting this serious actor next to my naked friend who's covered in powdered sugar. And he was just so fucking cool and straight and great. He just played it tough, and I'm like, "Could you throw the tiniest look at his dick?" And he goes, "Okay." And then he did it. I'm like. "That was fucking perfect." And I said, "So what do you think?" And he's like, "It is what it is."

### Speaking of working with serious actors, what's it like working with Brian Cox?

KH: You know, we didn't pursue him. His agent came to us. They had read the script and said, "Brian's a big fan of comedy and he doesn't get to do comedy a lot." We were fans of his, and he came in and did a great job. He came back this time. I think we pushed him too hard in the second movie.

ES: Too many night scenes.

PS: Doesn't love night shoots.

JC: But he was a delight.

SL: Oh, he's so good. He's such a professional.

PS: That's actually true with every outside actor we bring into our movies. They're all real actors, and we're five fucking assholes in the middle of this whole thing. Because guys like Brian Cox,

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#### THE HIGH TIMES INTERVIEW

everything they say, they nail it. He nails every single take.

ES: He only needs one take, really.

SL: And all those guys. Rob Lowe is a fucking pro. That guy is awesome. And we can't remember our fucking lines.

PS: We can. But we don't.

### It must be cool for those guys, though, to come onto a set that's fun and loose and not rigid.

KH: I think people like shooting comedies. It's a fun set. We have a very family-oriented set, too. But Cox was also fun because I hadn't seen him in 10 years. I hadn't seen him in forever, and he walked out there like, "Kevin, hi!" It felt good when he remembered my name. That's the lowest threshold, and I was like, "Oh, wow, he remembered my name!"

JC: The guy's great.

### Where did the original idea to play cops come from?

JC: We always gravitate toward movies that can handle five coequal male leads, and so you end up with things like police or firemen or...

ES: Basketball.

PS: A basketball team. We have a pool of possible ideas, and that was one of them.

### Have you had any run-ins with police?

PS: There was a time in our lives when we were road-tripping and getting pulled over by the cops.

SL: Yeah. Plenty of times. You know, you're driving and you're laughing and having a good time, and a cop walks up and immediately you're a wimp.

ES: They have so much power.

KH: And then the cop leaves and you're a tough guy again. But there was that moment where you were so vulnerable and you realize that that guy had so much power over you. If they had a



### "I REMEMBER WE WENT TO DO A LIVE SHOW IN DENVER RIGHT AFTER WEED GOT LEGALIZED. THERE WERE FANS HANDING US WEED IN FRONT OF COPS. WE COULDN'T HANDLE IT."

sense of humor, they could fuck with you.

### Did you get caught smoking?

JC: We never got in trouble for anything. But we've had a ton of cops come up to us [after Super Troopers] and say, "The thing we're thankful about the movie is that you made us seem like the good guys."

PS: Right. "We're used to being portrayed as humorless dicks." I never thought about that ahead of time. We just thought, okay, let's make [the cops] funny, cool, because they're us. But then [real police] were like, "Yeah, we are funny and cool, man. People don't know that."

KH: As we travel around and do

live shows, you go out to meet the audience afterward and it's this weird dynamic. The crowd is made up of cops and stoners. Those are the people in the room laughing at all the same jokes. It's a pretty cool dynamic.

SL: It's like shaggy dudes sitting next to dudes with tight crew cuts.

PS: And mustaches.

ES: And they're all laughing.

KH: I remember we went to do a live show in Denver right after weed got legalized. There were fans handing us weed in front of cops. We couldn't handle it.

SL: The cops were like, "Go for it, dude."

Do you smoke regularly?

SL: Yeah, for sure.

ES: As prescribed.

KH: My glaucoma kicks in.

JC: Certainly when we write together.

### It fits into your writing process, then?

JC: Yeah, it's good for creative.

SL: I think it's mandatory. I think it just opens up everybody's mind.

JC: Yeah. When we're generating jokes we do, but when we're generating the structure of the plot we don't.

PS: It's good for the very beginning, too, just like, "What do you guys want to do?"

### So *Potfest*, the long-awaited sequel to *Beerfest*—when is it happening?

JC: If people go to the theater [for Super Troopers 2] in a substantial enough number, then the road to Potfest will be very easy.

KH: Because Warner Brothers owns the movie, so they've just got to be like, "Yeah, it's worth it."

SL: But we'll make it. We'd love to make it.

ES: I mean, it was really just a joke. Then it started getting some traction. We started getting phone calls. Then we outlined it.

JC: We have several outlines. We have an animated one. We have two different outlines of the movie. We've written about 30, 40 pages of it. I have 40 pages on my computer.

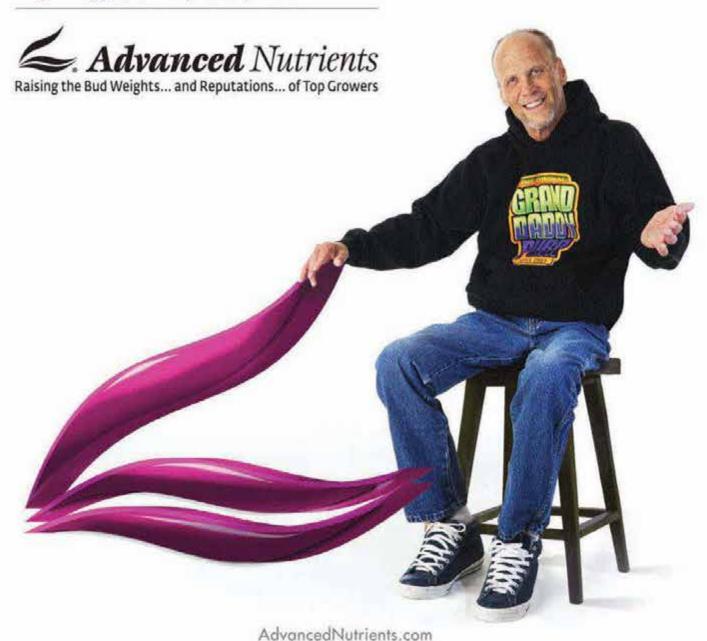
PS: Then we just kind of forked off and did *Super Troopers 2*.

### How do you account for the cult status of *Super Troopers*?

KH: I think it looks and sounds and feels to people like something they would have done themselves or could have done

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### THE HIGH TIMES INTERVIEW

with their friends. I mean, it was kind of homemade enough and made by dudes who were buddies. I think people love thinking about that idea, making movies with their buddies. Everybody has that conversation.

PS: I think it's also kind of layered in that way that cult movies are, in the sense that you can watch it multiple times and see new jokes.

ES: I think that lends itself well to cult viewing and guys getting together and watching it in the living room over and over again.

KH: There's also likability, I think. Our thing was always to try to create a world where people want to come hang out. Like even though my character's a dick, there's a lovability, at least. The idea was a group of friends hanging out and you want to be a part of that group of friends.

JC: Poor Farva.

SL: Nobody wants to hang with

PS: But I think there's also relatability, too. I mean, the majority of people who are fans, they've got a Farva. They work with a Farva or they're friends with a Farva.

### Do you enjoy being on set or doing stand-up more these days?

SL: They're both fantastic. Making a movie is fucking awe-

### "I THINK IT'S ALSO KIND OF LAYERED IN THAT WAY THAT CULT MOVIES ARE, IN THE SENSE THAT YOU CAN WATCH IT MULTIPLE TIMES AND SEE NEW JOKES."

some. Going out there in front of a live audience is the best.

KH: We work so hard to get onto the set, and you spend 80 percent of your time trying to get onto the set, which I think makes it more precious when it happens.

PS: It tastes a little sweeter, because it really takes so long to get to that point.

JC: Yeah, it takes so much money and effort and time.

So, for the 4/20 release of *Super Troopers 2*, how do you recommend people prepare for seeing the film?

SL: It's a good weed movie.

JC: It really is a good weed movie.

SL: Turn to your friend and say, "Dab me out."

PS: Dab meow-t.

KH: Oh, there you go.

### Does the meow game ever get old? Do people constantly try it with you?

SL: Happens on planes, like the captain will do it...

PS: I had it happen boarding a plane where I assumed it was because the gate agent knew I was there, and then I walked up and the guy was like, "Holy shit!" I was like, "Why were you doing that?" He's like, "Because I just do it. I do it all the time."

JC: I think it's funny when people come up and they're so excited to do it and they mess it up.

ES: Yeah, they don't get the joke.

They just say "meow" at you? PS: They're like, "I'm going to leave, uh, meow later..."

JC: "So how meow you doing today?"

SL: Yeah, you're like, that's not the joke.

PS: I think it's adorable.

JC: Someday they'll watch the movie and they'll be like, "Oh, I get it! It's 'now!"

SL: Holy shit!

PS: Well, that's dumb. [laughs] 💥







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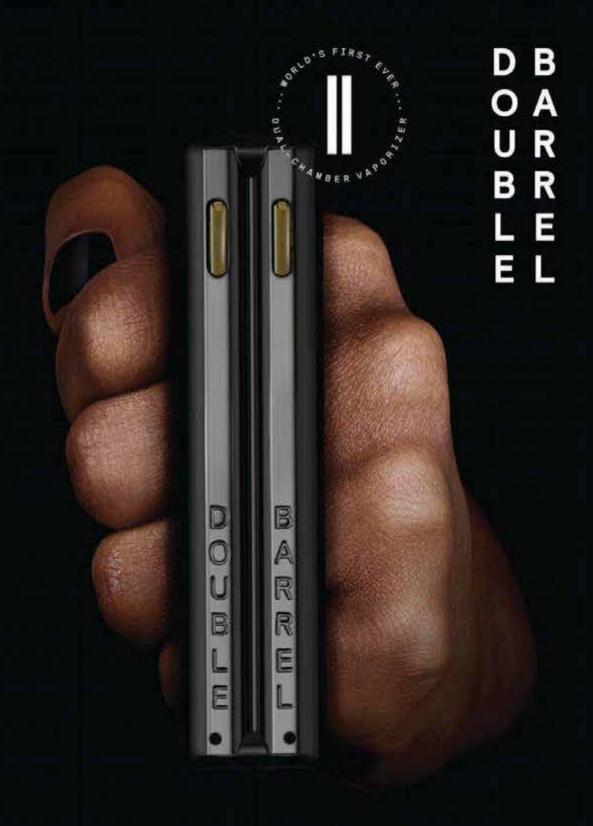
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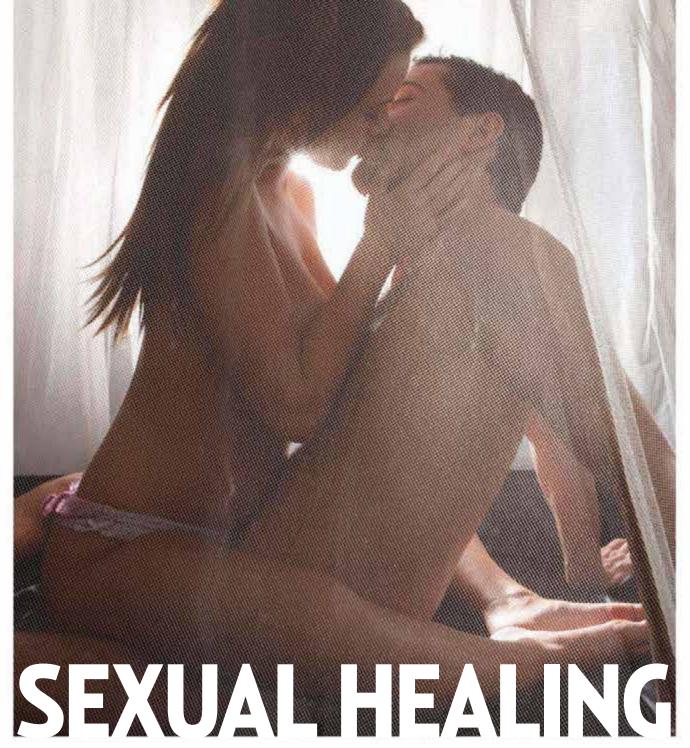












### WOMEN ARE INCREASINGLY USING CANNABIS TO COMBAT PAINFUL POSTPARTUM SEX.

BY JESSICA DELFINO -

FTER MY BABY was born, my doctor insisted, "No sex for six weeks." No problem, I thought. I didn't want anyone to touch my broken, sliced-up, tired, excessively fleshy body. I imagined it'd be years before I was ready. But I was surprised to find my libido return with impressive gusto, if not entirely back to normal, very shortly after I settled back in at home.

My six-week postpartum checkup consisted of a quick peek and a poke at my business, feet in the stirrups, headlamp, blue paper gown. It went well and my doctor gave my husband and me the okay to get busy. My guy was chomping at the bit and I was happy to oblige as well, eager to find some semblance of normalcy in my life and relationship, not to mention that I was craving romantic intimacy with the man I'd chosen to start a family with. We wasted little time. I didn't expect any issues, based on my exam outcome. However, I was again surprised—this time not so delightfully—to find pain where there hadn't ever been any before. It was a strange kind of discomfort, one I didn't recall ever having had experienced in that region, not since perhaps "the first time." It was a combined rawness and dryness, two words you don't typically want to associate with lovemaking. The elasticity I had appreciated in the past seemed to have vanished. I assumed it would just take some time, though I did have some fears and concerns. What if my vagina was permanently out of commission? What if having a baby had ruined sex for me somehow? I put those thoughts to the

side and opted to hope that time really does heal all things.

My first assumption was the correct one—my body would indeed need to take the coming weeks and months to ever so slowly heal. But what I didn't know was just how long it would require to fully recover—almost a solid year, in fact, before things even slightly began to resemble pre-baby sex. What was going on? Why was I experiencing this pain? I'd had a C-section. My southern parts didn't tear or even see any action at all, as no baby had been pushed or pulled out through the usual exit but had instead been loaded out through the freight elevator.

From my research—Google searches, doctor chats and talks with moms who'd experienced similar situations-in an attempt to discover what was wrong with my sex parts and how to get them back to normal, if such a thing were even a possibility, I learned that the way the baby is born actually has little to do with whether or not postpartum sex will be painful. There are a host of reasons that sex after a baby can hurt. A sampling of challenges includes increased dryness and difficulty in self-lubricating due to hormonal changes, especially in breastfeeding mothers; pain stemming from nerve pressure; muscle soreness or damage that may have occurred during pregnancy; vaginal tears during labor and delivery; tissue that has not repaired properly or scarred; and even damage to the pelvic floor-just one more reason for all women to remember to do those Kegels. Thus, a natural birth or a C-section birth both may bring with them a large, necessary window of recovery time for the whole baby-making region.

It turns out most women experience dyspareunia after giving birth, according to a study by the Murdoch Children's Research Institute. For the uninitiated, that hot new vocab word of the day translates to "painful sex." The study states: "Nearly 9 in 10 women experience pain the first time they have sexual intercourse after childbirth." That's almost all mothers. The statistics could be skewed, however, and the results could be even higher, 9.5 or 10 out of 10, for example, but many women are hesitant to discuss painful sex.

In a 2017 article from *todayspar-ent.com* titled "Postpartum Sex: Why It Sometimes Hurts," several mothers, using only fake names, shared their stories, which ranged from PG-13 to outright naughty.



MANY PEOPLE HAVE DIFFICULTY TALKING ABOUT SEX WITH THOSE WHO ARE CLOSE TO THEM, LET ALONE WITH PEOPLE WHO ARE ESSENTIALLY STRANGERS, SUCH AS THERAPISTS OR DOCTORS.

Say you find yourself in the awkward, stressful, pained position of returning, finally, to a place of intimacy with your significant other just to find that things are clearly not the way you left them. Upon that typically enjoyable moment of penetration, you instead feel a burning or excessive tightness that makes sex nearly impossible, a blockage or a sensation like you have to pee that won't go away. What do you do? Whom do you talk to? Many people have difficulty talking about sex with those who are close to them, let alone with people who are essentially strangers, such as therapists or doctors. It's odd how, one minute, you have no shame when your ob-gyn sees everything up close as they deliver your baby but then feel inhibited when it comes to discussing the intimacy and sexuality that led to the birth to begin with.

Some women have no problem discussing the details with their general practitioner or ob-gyn, and that's a good first step. With your medical team, you can make decisions on how to proceed, including considering treatments such as an estrogen topical cream, Kegel exercises and physical therapy, aspirin, anti-inflammatories and opiates,

surgical-grade silicone inserts that stretch the area over time, shots directly to the site(!) or, if all else fails, operations to repair the damaged tissue or scarred areas. None of these are foolproof options; even in combination, there is a chance that they may not work. Results will vary.

One mom, Angie, opted for lidocaine injections to help numb the pain and break up the scar tissue. After a year of these treatments, she ended up needing additional surgery. "This is all the extreme end of what can happen," she explained. "I suffered for three years before finding any sort of help."

Another mom lamented that it was 18 years since the birth of her baby and she was still experiencing pain, and yet another said it had been 25 years of painful postpartum sex for her.

Here is where it takes a strong constitution and commitment to finding a solution, because it's also a situation that your doctor may not even be sure how to correctly remedy. "The key is getting someone who actually listens to your concerns and does something about it," Angie explained. "I went to at least four different ob-gyns before anyone even took me seriously. One male doctor told me to just give up and that it was a lifelong problem I basically had to deal with and that 'I'd be fine.' You seriously have to be your biggest advocate."

One mother suggested that coconut oil was the best lubrication that she had found to help the physical difficulties of painful postpartum sex. Another said that she had some luck with cannabis lube. "I ended up buying really nice lube from Sliquid Organics. Great products." Other mothers admitted to making their own cannabis sex lube instead purchasing it. About 10 moms I spoke with shared their recipes for a DIY cannabis-infused coconut-oil lubricant that they all claimed worked wonders. If you are a mom who suffers from postpartum sex pain, you may be thinking, "Well, gee, that's great, how can I get my hands on it?"

Unfortunately, most cannabis lubricants are only available in legal markets, and are not even allowed to use the word "lubricant."

Empower is an Oregon-based company that makes cannabis-infused topicals. At the helm of Empower is Trista Okel, who has dedicated her life to developing her line of cannabis oil that helps offer relief to people who suffer from a vast assortment of body pain. Her main goal in creating the company was to usher in



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an end to the opiate epidemic. "In 2004," she said, "I started working on my flagship product, Empower Topical Relief Oil for my mom." Okel's mother suffers from three kinds of arthritis and pain in her back stemming from breaks in several places and fused discs. From 2004 to 2013, Okel experimented on her mom and others in the community who were experiencing pain and medical issues. One raving success story stars a "conservative cattle rancher, a Lutheran church Republican" who suffered from rheumatoid arthritis. "She had to take a Humira shot every three weeks," Okel said. "I gave her a jar of oil and I said, 'Use it three times a day for three months solid.' And so she did. Six weeks into our three-month trial, she stopped using Humira and hasn't used it since. By the end of the three months, she'd gone into remission with her rheumatoid arthritis. And since 2008, when we did this, she's had three flare-ups total. And she just uses the oil. Before, it happened all the time unless she was on the Humira." Furthermore, Okel's client passed a urinalysis stating there was no cannabis in her system.

The testimonies on Empower's website are a long, flattering list of high praise for the company's products. Okel's

CUSTOMERS FLOODED HER WITH REQUESTS TO CREATE A CANNABIS-INFUSED TOPICAL WHICH WAS PH-BALANCED AND SAFE TO USE SEXUALLY, WHICH SHE DID. IT EXISTS TODAY AS A PRODUCT CALLED 4PLAY.

Empower topical oil worked with such success on arthritis and other types of pain that some of her clients imagined the wonders it might do when used on a vagina. "I heard some people were using the regular topical relief oil for sexual encounters and that was really concerning for me," Okel said, "I do not recommend that under any circumstances-it has carrier oils and essential oils including wintergreen which are not good for a woman's flora. They work great for pain but not on mucous membranes." Customers flooded her with requests to create a cannabis-infused topical which was pHbalanced and safe to use sexually, which she did. It exists today as a product called 4PLAY.

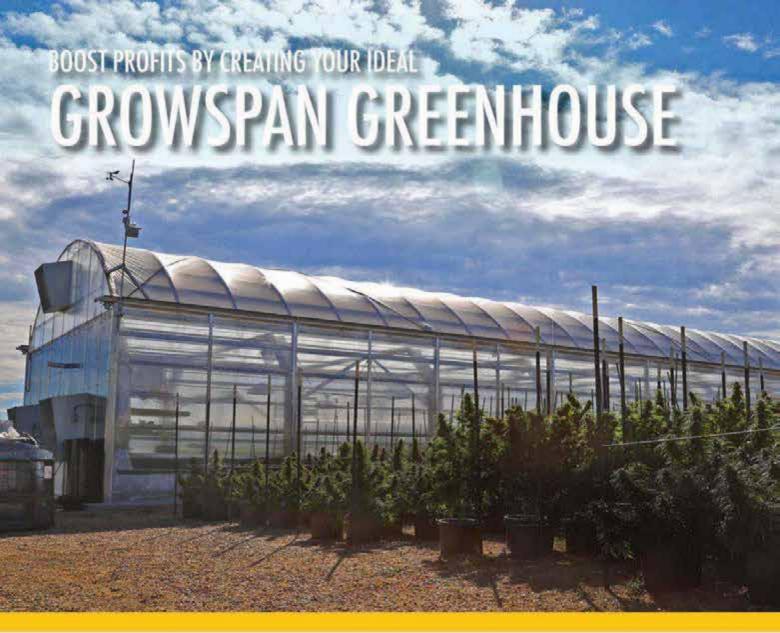
Okel knows full well the benefits of cannabis being used vaginally, because her own wife offers yet another positive testimony.

"My wife had polyps that caused a lot of pain her entire life," Okel said. "Until she tried the 4PLAY product, she could not have any kind of penetration without severe pain."

In addition to the sexual help her product offers, Okel was also delighted to find, as an added bonus, that her female employees benefited greatly from using her product during menstruation. "We have found that since they started buying and using 4PLAY, our productivity rates have gone up," Okel said. "Nobody calls out sick for cramps anymore."

With her own happy wife, enthusiastic employees and hundreds or more satisfied customers who've seen their sex (and work) lives transformed due to the use of this product, you'd think it would be available all over the country, and those nine out of 10 moms who are suffering from painful sex would be reduced to a much smaller number. Unfortunately, that fairy-tale ending is simply not the case. The laws involving what Okel can and can't say about her products keep her tongue tied with a bevy of red tape





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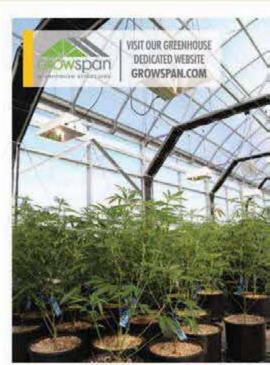
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### **SEXUAL HEALING**

and fine print. "The [4PLAY] product would probably sell much better than it does, but we are not allowed to make claims," Okel said. "I can share testimonials. Yet I just found out that if someone prints a testimonial on my Facebook page, as a company, I can't like it. It's crazy. Because if I like it, they assume that's me making a claim."

The wording challenges play a part in how women and mothers are able to learn about and find the cannabisinfused sex products that may help them enjoy intimacy again. "Lubricants are FDA-regulated as medical devices," Okel explained. "If I wanted the [4PLAY] product to be a lubricant, I'd add more viscous material to it. It'd also probably have a lot of chemicals in it. So it's specifically not a lubricant because of that. I know of a company in California that started a CBD lubricant and was promptly shut down by the FDA. So we specifically refer to ours as a 'sensual oil,' as do our competitors. Ours is stronger, and the proprietary oil sets us apart. Ours is also the first developed by a woman."

So, for now, 4PLAY is only available in Oregon; however, as of this writing Empower has signed a licensing agreement with Washington State (where its products will be available in April 2018) and is in talks to be distributed to other states as well. But that doesn't keep enterprising, crafty moms from finding a way to get cannabis onto their genitals.

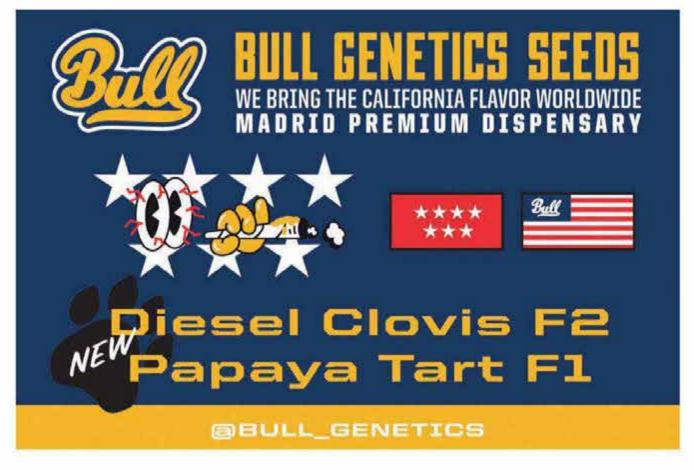
One mom we'll call Melissa makes her own cannabis-infused lubricant in an easy-enough process at home (we don't recommend the homemade-lube route, but it's understandable that people are desperate). "I use whole plant material, finely ground up into smaller pieces," said Melissa. "I cook it in the oven on a baking sheet. Then on the stovetop, I put coconut oil in a pan with the decarbed [baked] marijuana in the oil. I cook it on low for a few hours, then use cheesecloth to separate the oil from the cooked buds. After this, you will have a nice green-colored oil: marijuanainfused coconut oil. I use it as a pain reliever and lubricant. If I know we are going to have sex that night. I'll use some. It really helps with the dryness and pain for me. My husband didn't have any adverse feelings or anything. The first few times I didn't tell him, and he was saying how good it felt because of the lube aspect of it."

Because Melissa is not selling or

advertising her product, she can call it whatever she likes. The lube helped her ease her way back into a healthy sex life after the C-section birth of her daughter. "I waited the six weeks and tried to have sex," she said. "It hurt so bad, there was no way to continue." Thanks to her recipe, Melissa has been having painfree sex since a few months postpartum.

It seems the FDA is light-years behind the curve on this issue. Otherwise the agency would find a way to make products like Okel's Empower 4PLAY readily available for the nearly 100 percent of mothers who could use the product to aid their slow return to intimacy. When I think of the women who have suffered with postpartum sex pain for 18 and 25 years, I could cry. My vagina could shed a tear as well. I remember the pain and the fear. I remember hoping it was just a phase, and being thankful to find that it was one. But there are so many others who still suffer in silence, who don't even know there are options out there.

Here's hoping that one day cannabis will be legal everywhere, and with it the assortment of lotions, lubes, oils and goodies that creative and industrious people have imagined and developed into existence.







### **PATIENTS**

Sifting through the changing landscape of medical marijuana laws in your state can become overwhelming. ManjuanaDoctors.com is here to help.

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Your Journey with

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Patients can start by checking our database of legal and non-legal states to learn about medical mariluana laws in their states. Our state database includes information about qualifying for medicinal cannabis and how to complete the registration process.

For patients with limited mobility, we have information about telemedicine services in qualifying states -- which helps bring care right into the patient's home.

### Find a QUALIFIED PHYSICIAN

Once the registration requirements are known for each state, patients can check out our list of physicians certified to recommend medical marijuana. Not only can patients search for physicians that are nearby, but they can also view reviews. and ratings for physicians to get a feel for a practice before making an appointment. We've made it easy for patients to pick the right physician -- including practice information, office hours, and pre-visit requirements. Patients can schedule their appointment online right from the comfort of their home. A recommendation from a qualified physician in our database helps patients obtain the legitimate medical documentation they need in order to start the registration process for a medical marijuana card in their state.



### Fill Your Recommendation CLOSE TO HOME

After patients have completed the registration process and obtained their medical marijuana card,

MarijuanaDoctors.com can help them find a dispensary to fill their recommendation. Not only do we constantly update our list of dispensaries in legal states, but we have our finger to pulse of non-legal states with changing legislature and are first on the scene when dispensaries open in these states.

Patients can find rating and review information about local dispensaries to help them find the best budtender for their needs. Soon our team will be integrating ordering functionality so that patients can order directly from dispensaries, making it even easier to get the medical marijuana. they need to treat their qualifying. conditions.

### The Nation's #1 Medical Marijuana Network

**Book With** A Doctor



Book With A Dispensary

2



Follow-Up With The Doctor



Order Medicine Products



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No Booking



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### Marijuana Doctors: One-Stop Portal

If you're a medical marijuana patient or doctor, finding the resources and dispensaries you need can be difficult.

If you're a medical marijuana certified physician, MarijuanaDoctors.com has the resources to connect you with thousands of patients every month.

### **PHYSICIANS**

Our subscription services help us optimize your profile to help draw more patients to your practice. We are constantly adding services to help physicians connect with patients in this digital age.

Digital Appointment Assistant

### PRACTICE MANAGER

### At Your Fingertips TELEMEDICINE

We are happy to offer a paperiess HIPAA Compliance Check-In System for physicians registered on our site. Practice Manager, the new electronic check-in system, will process forms and instantly store files into the EMR. The system will make processing patient paperwork easier, leaving physicians and practice managers just to review notes and schedule follow ups. The check-in system will also have functionality to set up reminders for patients about scheduling follow-up appointments through the Marijuana Doctors site, text, or email. The system will also give patients the opportunity to rate the practice and their experience, helping boost the practice's credibility with great reviews and testimonials.

Our new registration and digital signature automation will technically streamline workflow for practices using telemedicine. Doctors can connect with telehealth patients by simply clicking a few buttons in their Practice Manager. Once a doctor connects with a patient through Practice Manager, patients have the ability to see when doctors are available for a live chat about their medical marijuana treatment options. Doctors have the ability to use MarijuanaDoctors.com to have patients fill out telehealth forms, process payments, receive medical records, schedule a HIPAA compliant virtual appointment, add notes, finalize appointments, and schedule follow-ups to boost patient retention. This system is the most

seamless way to manage your practice's patients and reach out to new patients by connecting with the tens of thousands of unique visitors that use ManjuanaDoctors.com every day to understand medical marijuana.



New Functionality

### **BUDTENDERS & DISPENSARY OWNERS**

Catering even further to the medical marijuana industry, MD also provides marketing solutions for producers, dispensaries and cannabis clinics. Once a patient has received a medical marijuana. recommendation and the physician has registered the patient on the state's department of health website, patients can now request an appointment with local dispensaries using our network.

MarijuanaDoctors.com gives producers the

ability to vertically integrate within their market, understanding that patients using medical marijuana to treat debilitating and chronic conditions hold a lifetime value as customers of a dispensary.

As with physicians, producers now have the ability to create profiles optimized for their location and benefit from the patient funnel that is generated by our network's skillfully developed infrastructure. Producers will now share the

automated-functionality of scheduling patient appointments, and have access to the telehealth portal by which they may consult with patients online, instead of in-person. Furthermore, producers may also choose to become featured advertisers, opting for advanced placement in the state and city static listings, which always come up first in the search results.



Marijuana Doctors seeks to educate patients in states. where medical mariumna is legal. Our goal is to be one-stop resource for

patients to have their medical mariliana needs met in cultivation process, the manufacturing process, and one location. In order to best serve our patients, we Will provide information about medical mariusna laws, availability of physicians in patients' areas, on demand access to physicians and pharmacists,

information about dispensing options, delivery services, ancillary products, easy online ordering, and automated product ordering. As we continue to medical marisana licenses in qualifying states. We experid our patient resources, we are excited to offer 360 view tours of featured dispensaries, the products. Our patients are able to do everything-from research to ordering to reordering-from the comfort of their homes.

As a MSO, Marijuana Doctors can facilitate these services on behalf of medical organizations with have created security checks and balances to ensure that deliveries and sales can only be obtained legally. taking the pressure off our patients. As your go-to resource for marjuana, we will keep adding the information you need to make receiving the medical marijuana you need to treat your qualifying condition as easy as a click.



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N THE WORKING-CLASS Lima district of Pueblo Libre, I make my way to an apartment complex and up to the flat of Ana Álvarez—the unlikely woman almost singlehandedly responsible for Peru's groundbreaking new medical-marijuana law.

In a bedroom, 18-year-old Anthony, Álvarez's son, watches a noisy *Spider-Man* movie, occasionally interrupting through the open door as I chat with his mom in the living room. Anthony suffers from tuberous sclerosis complex, a serious genetic disorder that is often accompanied by a severe form of epilepsy, and he was the voiceless central figure behind the events that led to a major reform of Peru's drug laws in 2017.

It is difficult listening as Álvarez, a single mother of four who works as a dental technician, relates the years of anguish that led up to this.

"Anthony has suffered from severe epilepsy since he was 3 years old," she tells me. "For years, he had seven or eight fits each day. Pharmaceuticals would work only for three or four months. Trying one medicine, another—that's how the years passed. We went to different neurologists, they all said the same thing—there's no cure. And with each fit, neurons are killed, and the condition worsens."

At 11 years old, Anthony was suffering from a moderate intellectual disability. By 16, he was in what Álvarez calls a "psychiatric crisis." He had scars from falling and there were emergency-room visits and periods of internment in mental hospitals. His muscles atrophied and he couldn't sleep—and he was "acting out emotionally."

Finally, Álvarez's two young sons from a second marriage, Hugo and David, were sent to live with their father in the neighboring district of San Miguel because it was too distressing for them to share an apartment with Anthony. Álvarez starts to cry as she recalls this. "I'm sorry," she says. "It was a very difficult time for us."

Álvarez checks off a litany of pharmaceuticals she's tried—each associated with side effects such as liver damage or loss of appetite. "Each would calm him a little, but damage something else," she says. "And none worked for long. By 2015, he was having five to 20 fits a day. He was taking 16 different pills a day for epilepsy, and six more for psychiatric problems. Life didn't seem worth living."

### HOPE AFTER TRIBULATION

Then, on October 10, 2015, Álvarez saw a CNN report on Charlotte's Web—the cannabis variety heavy in the non-psychoactive



"PEOPLE DON'T KNOW THEIR RIGHTS UNDER THE LAW, AND THE POLICE EXPLOIT THAT. BETWEEN DETECTION AND ARRIVAL AT THE POLICE STATION, ALL THE BRIBES TAKE PLACE."

cannabinoid CBD, whose efficacy in treating epilepsy was then stirring new medical-marijuana laws in several US states.

"One day, in desperation, I made a *maté* of marijuana, which I bought on the black market," Álvarez says, using the Spanish word for any herbal-tea preparation.

Anthony's reaction was dramatic. "His eyes turned red and he slept and slept—almost 72 hours," Álvarez says. "His pulse and breathing became relaxed. He went two days without a fit for the first time in years. And I began investigating."

Álvarez established contact with Paulina Bobadilla of MamáCultiva, the Chile-based cannabis-advocacy organization that led the effort behind that country's medical-marijuana program, then just getting off the ground.

"She told me I had to cultivate, prepare my own medicine for my son," Álvarez says. "But I knew nothing about this. It was something totally new for me."

With Dorothy Santiago, another Lima mom whose infant son was suffering from a similar ailment, Álvarez started the instant-messenger group Buscando Esperanza—Seeking Hope—in December 2015, after they found each other on Facebook.

The turning point came when Álvarez and Santiago went to a meeting of a mutual-aid group for family members of epilepsy sufferers, and one member said she "used *gotas* to control it"—drops of cannabis oil, administered orally.

In April 2016, Javier Pedraza of the Barcelona-based Spanish Observatory of Medicinal Cannabis held a talk at the Peruvian Medical College in Lima. Through connections made there, Álvarez got a contact to provide *gotas*—but at cost of 1,320 soles a month. That's a prohibitive US \$430, more or less.

Under administration of the *gotas*, Anthony began to come back from the brink. His fits became less frequent. "He began to eat and sleep, his manner became more calm, he began to connect," Álvarez says. "His quality of life improved very much."

Now convinced that cannabis oil was vital medication for her son, Álvarez launched a public campaign—petitions, marches, vigils outside the Legislative Palace and Ministry of Health, and interviews with the press, including an appearance on the national TV news show *Punto Final*.

"After the TV report, many people contacted us," Álvarez says. Buscando Esperanza was formally launched as a collective. The initial members were five mothers, with children suffering from epilepsy, fibromyalgia and cancer.

With help from figures with cultivation experience in Lima's traditional cannabisactivism scene, Buscando Esperanza established a grow site in an apartment in the San Miguel district.

The collective was just drying its first harvest, and not yet producing oil extracts, when the police raided the apartment on February 7, 2017. Álvarez and two others found themselves facing criminal charges—and the possibility of 15 years behind bars.

### **CONGRESS RESPONDS**

The arrests had the effect of forcing the issue before the public eye—and in the outrage over the raid, the moral arc of Peru's political process began to bend toward justice.

Shortly after the raid, Congress members introduced a bill to legalize medical marijuana, under government supervision. The bill won support from lawmakers of the ruling centrist party of President Pedro Pablo Kuczynski, Peruvians for Change. It also won support from figures in the left opposition bloc. This alliance was able to overcome intransigence from die-hard elements of the right-wing bloc in Congress, and the bill was approved by Congress's Health Committee and (to greater surprise) Defense and Security Committee.

On October 20, after four weeks of debate, Congress approved the bill—by a vote of 60 in favor and four against, with six abstentions. (The most strident





# HIGH X ANGUSH

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opponent was Bienvenido Ramírez of the right-wing bloc, who called medical marijuana "an open door to narco-trafficking." He had just weeks earlier earned ridicule with his public speculation that reading too much can cause Alzheimer's disease.)

Álvarez is not entirely happy with the law, which still awaited the president's signature when we spoke. It bars homegrown cannabis, permitting cultivation only by laboratories (a term not actually defined in the law's text), universities and "public entities." It assumes importation will primarily meet retail demand.

Álvarez fears this will mean high costs that will keep cannabis products inaccessible to many families. She also emphasizes that personal cultivation affords greater control over *cepas*—varieties.

"Even if a patient has the same diagnosis as another, it doesn't follow that the same variety will work," Álvarez says, citing the experience of the members of her collective. "We also want control over cultivation to know that no chemicals are used, that the product is all natural. We want the law to meet the needs of patients, not the big industrial companies."

### STANDING UP TO THE US EMBASSY

In Lima's fashionable Miraflores district, I visit with Ricardo Soberón, Peru's foremost drug-policy-reform advocate, in the apartment he shares with his family, filled with folk art and trinkets from coca-growing campesino communities. As an adviser to Tania Pariona, an indigenous lawmaker from Ayacucho region, Soberón helped draft the medical-marijuana law.

Soberón also briefly served as Peru's drug czar under President Ollanta Humala in 2011, and called a halt to coca eradication before losing his post in a cabinet purge. He continues to promote his tolerant views through his nongovernmental organization, the Investigative Center on Drugs and Human Rights (CIDDH), which has received funding since 2009 from the Open Society Foundations.

Soberón emphasizes that the bill he helped craft was far more liberal than the version that finally passed. "We had a much more ambitious proposal, which included personal cultivation," he says. "But these were blocked by APRA and *fujimoristas*." Those are the two big conservative parties in Peru's Congress—the latter being far-right followers of two-time presidential candidate Keiko Fujimori, daughter of the ex-dictator Alberto Fujimori.

The conservatives also added provisions mandating registration of all users with the Ministry of Health, which will issue licenses to sell or conduct research with cannabis.

But Soberón sees another hand behind the official intolerance. "The influence of the US Embassy is still very strong," he says. He especially cites the "conservative current" around the Education Center for the Prevention of Drug Abuse (CEDRO), a Peruvian NGO funded by USAID, and the drug czar's office—officially, the National Commission for the Development of Life Without Drugs (DEVIDA). Carmen Masías Claux of CEDRO succeeded Soberón as DEVIDA chief in January 2012-and she was reappointed to the post by the thennew president Kuczynski in September 2016. She also pushed hard for a restrictive version of the law.

Soberón does see some progress over the years. Personal quantities of illegal drugs were decriminalized in Peru in 1991. In a 2006 reform of Article 299 of the criminal code, these quantities were defined as eight grams of cannabis (a little more than a quarter of an ounce), five grams of *pasta* (cocaine paste) or two grams of powder cocaine. (Articles 296 and 297 impose harsher penalties for cultivation and trafficking.)

But the law is not always honored. One of the things his CIDDH does is operate a hotline—dubbed the Green Line—"for users who are apprehended anyway," Soberón says. "People don't know their rights under the law, and the police exploit that. Between detection and arrival at the police station, all the bribes take place."

### EMPATHY IN THE CORRIDORS OF POWER

A few days later, I make my way to a government office building near Peru's Legislative Palace, in Lima's downtown historic center, to meet with Alberto de Belaunde, who represents the Miraflores district in Congress and co-sponsored the medicalmarijuana law. A personable, bearded and surprisingly young man (just 31 years old), de Belaunde welcomes me into his office and immediately starts telling me how he arrived at his commitment to the medicalmarijuana issue.

"Prejudices and fears prevent us from arriving at a better quality of life," de Belaunde says. "That's why I fight for marginalized people, like the LGBT community, and for reproductive rights." He's even advocated removing penalties for abortion—although, he acknowledges, "That's a very difficult position in a conservative country like Peru."

De Belaunde says he really became aware of the medical-cannabis issue when the February 2017 edition of the magazine Somos ran a feature on Buscando Esperanza and other such collectives that were forming elsewhere in Peru. A week later, the raid happened. A few months after that, in June, Kuczynski was elected president. As a human-rights adviser to the president, de Belaunde knew he was well placed to see the medical-marijuana law through.

"The law is too restrictive," de Belaunde admits. "Medical marijuana is very personalized; different *cepas* have different effects on different individuals."

De Belaunde is still trying to craft a way around these restrictions. "We are hoping for legalization of patient collectives in conjunction with state institutions and universities in the regulations," he says.

Beyond that, de Belaunde says he favors legalizing the recreational use of cannabis. "But in the current Congress, it is not possible," he says. "It's too conservative."

Despite the remaining challenges, de Belaunde thinks that a corner has been turned with the medical-marijuana law. "This is a historic step," he says. "This process could be a model for laws in Peru: not an abstract debate, but bringing empathy to the process along with scientific evidence—the faces of these mothers who found in cannabis the only thing to bring their children a better quality of life."

### **COMPASSION ON TRIAL**

In Lima's bohemian enclave of Barranco, I visit with Luis Gavancho, Peru's premier cannabis activist, in the ramshackle old house he shares with his buddies a few blocks from the cliffs overlooking the sea. A surprisingly clean-cut young man with short hair and the body of a fitness freak, Gavancho is the leading light of the group Legaliza Perú, which (among other activities) has each May since 2010 organized Lima's entry in the Global Marijuana March. Gavancho is now among the three facing charges in the Buscando Esperanza bust

Despite the threat of prison time, Gavancho exudes only defiance. "There was no order from a judge or prosecutor for the raid," he says. "It was totally illegal."

While Álvarez was charged as the president of Buscando Esperanza, Gavancho was charged because his passport was found on the premises. The third arrestee was Dr. Juan Lock, a physician who was advising the group, and whose name was on the apartment's lease.

Gavancho believes the police acted unilaterally, entirely on the basis of a neighbor's suspicions. Ironically, while the nosy neighbor may have smelled cannabis,



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### MOTHER COURAGE IN PERU

all she could see was the apartment's roof-top garden where strictly legal vegetables were being grown—carrots, radishes and the like. One of these was huacatay—a traditional herb used in Peruvian cooking, whose leaves happen to look somewhat like those of the cannabis plant. On this (false) visual evidence, the neighbor apparently dropped a proverbial dime. The cops raided, and found the indoor cannabis grow op below—680 grams drying from the first harvest of seven plants, with eight new clones also on the premises.

But Gavancho says his argument in the courtroom will not be the illegality of the raid. He intends to use a medical-necessity defense—which is completely unprecedented in Peru.

The crime the three defendants are charged with is "traffic in illegal drugs" under Article 296 of the penal code, with language in the statute citing threats to the "public health."

"Yet eight grams is allowed under the law," Gavancho says. "This is presumably per person and per day. And we are a collective, growing for medical need. So we have a right to produce enough to meet our daily needs." Gavancho is also a medical user, using cannabis to relieve his lower back pain from a sports injury. He plans to demand that the charges be dropped.

But this may not be decided for a while. As we speak, the entire legal process is on hold, because Poder Judicial, Peru's justice department, is shut down by a strike. Gavancho laughs and rolls his eyes as he tells me this. "Peru!"

### **CELEBRATION IN A SECRET GROWROOM**

On November 16, my last day in Peru, President Kuczynski signed the medicalmarijuana bill into law—officially PL 1393, "Regulated Use of Cannabis for Medicinal Ends."

"Here we are breaking with a myth," Kuczynski said, referring to marijuana's reputation as a dangerous drug. "Peru is turning several pages, moving toward modernity."

He congratulated the members of Congress who pushed for the law, naming de Belaunde and Pariona, who both attended the signing ceremony at the presidential palace. Also in attendance were Ana Álvarez and Dorothy Santiago of Buscando Esperanza, standing proudly alongside Kuczynski wearing the green scarves they had adopted as the symbol of their cause.

But President Kuczynski, also accompanied by the minister of health, Fernando D'Alessio, stressed that "the government is in charge of supervising the operation of the law."

With the president's signature, the clock was ticking. Peru's Congress must work out a regulatory regime for the law—determining whether patients will have access to herbaceous cannabis (something the text of the law is ambiguous on), or, more ambitiously, be able to cultivate in regulated collectives.

Immediately after the signing ceremony, I accompany Álvarez and Santiago as they are driven across the city to an industrial sector of south Lima. In the front seat of the car is Saúl, a member of a new cultivation collective that is now helping Buscando Esperanza. We pull into a warehouse, and Saúl leads us down a narrow stairway to a basement room where a veritable jungle of cannabis plants flourishes under an array of grow lights.

The variety is impressive—from the bright greens of Chem Dog to the deep purple of an *indica*-heavy LA Confidential—and some *cepas* are the collective's own creations. Saúl proudly points out Pisco Sour, named for Peru's national drink (a cross between Sour Diesel and Sensi Star) and Mandarina Sour (Sour Diesel x OG Cheese). The original seeds were brought in personally by collective members, or purchased by mail from Canada and the Netherlands.

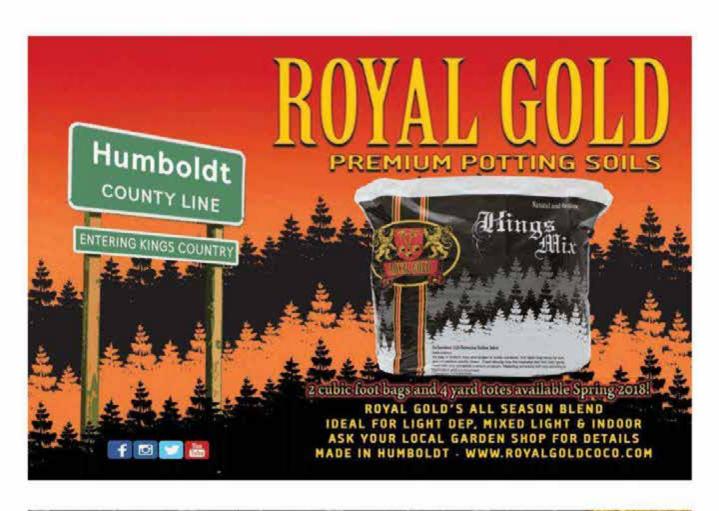
Saúl, whose collective is dubbed Jepelacio Farms, is also seeking to commercialize these strains through his enterprise Growers Peru, under the brand name Next Level. Saúl points out the deep-water-culture method the growroom uses—his own design of pipes and pumps to recycle water.

The lights, reflectors, fans and other electrical equipment were mostly brought in from the United States. However, with the recent opening of Lima's first grow shop—Marley's Planet, in Miraflores—this kind of equipment is now available locally.

Saúl tells me this is one of five such grow ops in the Lima area, and he has already sold seeds (clandestinely) to outdoor growers, mostly in the Norte Chico area. This is the stretch of coast north from Lima through the adjoining region of Áncash, which is emerging as Peru's key cannabis-cultivation zone.

As for Ana Álvarez, she is visibly relieved at her son Anthony's progress. Her two younger sons Hugo and David are now living back at home with her. Her family is reunited. And she was the prime mover behind the most significant reform of her country's drug laws in a generation.

But the months to come will determine how much freedom the hard-won medical-marijuana law will really afford—and whether Álvarez and her codefendants will face prison time as the cost of their victory. \*\*





### EXPERT GROW ADVICE LIGHTING YOUNG PLANTS, SLOW GROWTH, CUTWORMS,

PRUNING STRESS AND MORE...

Send your cannabis cultivation questions to @deardanko or deardanko@hightimes.com



SUBJECT: Bagged Bud FROM: Maury

First off, I have a lovely legal outdoor grow on Maui that has been so much fun for a 68-year-old who worried a lot in his 30s about where he would get pot when he gets old(er).

Anyway, since I started growing I've been told to use Boveda 62% humidity bags in my mason jars, which I've been doing. I have to assume they're working because I've never had any problem with stored pot going bad, but, then again, I have no control group.

Here's my question: I put the Boveda bags in the jars right when I first put the cannabis in them after drying was complete and during the curing process (while still opening the jars periodically to let them breathe). I

am now wondering if by controlling the humidity with these bags during this curing stage I might be adversely affecting the curing process in some way. Should I keep using them right away or wait until I am past the curing stage and into storage before I add the bags to the mason jars?

Dear Maury,

I think you're better off only adding the Boveda bags to your flowers once they're finished curing. Hawaii tends to be a humid place to begin with, so my advice is to hang-dry slowly until the stems snap, jar up your flowers for curing and put them the Boveda bags only after the entire process is finished to your liking. Your flowers will stay at the perfect moisture level and you'll be able to enjoy them for a long time.





SUBJECT: Lighting Young Plants

FROM: Jesse F.

Can I vegetate my plants under my T5 fluorescent light and then switch to my high-pressure sodium (HPS) light when it's time to flower? Will this affect my ultimate yield?

#### Dear Jesse,

Absolutely! It's perfectly fine to grow your plants under a fluorescent light fixture during their vegetative stage and then switch to stronger HID (high-intensity discharge) lighting for the flowering stage. It will save you money on electricity and cooling costs but, as you said, it might affect yield because the vegetating plants will grow somewhat slower under fluorescents. Simply add a week or two of vegetative growth if you want a bigger harvest. Just remember to keep the T5 fluorescent close to the tops of your

plants and raise the HPS up higher when you install it, as it gives off much more light and heat.

SUBJECT: Slow Growth

#### FROM: Alfred

I planted some Afghan Kush seedlings and they came up, but they haven't grown much since. They're all about 2 to 3 inches tall. I went to my local grow store and purchased some nutrients, which I discovered the plants were sorely lacking. However, they're getting 18 hours of light and the temperature is between 75-85°F with humidity around 60%. I started giving them nutrients three days ago. How long should I wait to see if this will work?

Dear Alfred,

Plants need time to recover from stresses such as underfeeding. The climate in

your grow space sounds decent, so your plants should "green up" and start to grow within a week or so. Start slow with the nutrients at first, using half the recommended strength, in order to avoid burning your young plants with too much food all at once. If you see steady new growth and the leaves start to go slightly yellower, boost the amount of nutrients you're feeding them. If they don't seem to be recovering, you may have an issue with the amount of light they're receiving. You may need to lower your existing lighting system or purchase a stronger one, depending on what you're using as a grow light.

SUBJECT: Cutworms

#### FROM: Tennessee Jed

Help! Something is killing my young outdoor seedlings and transplants. They're



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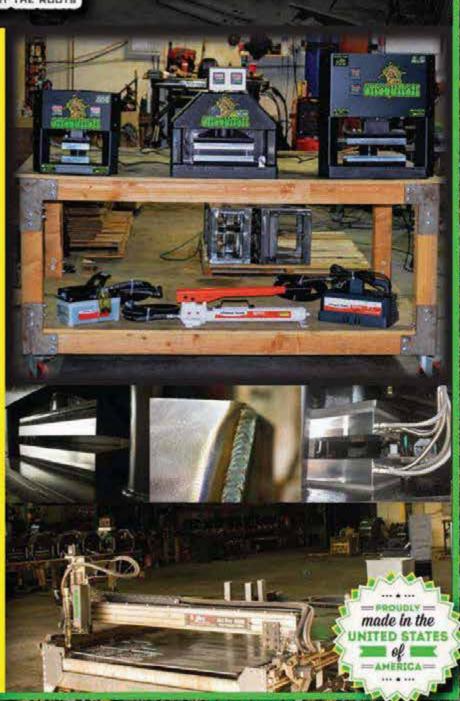
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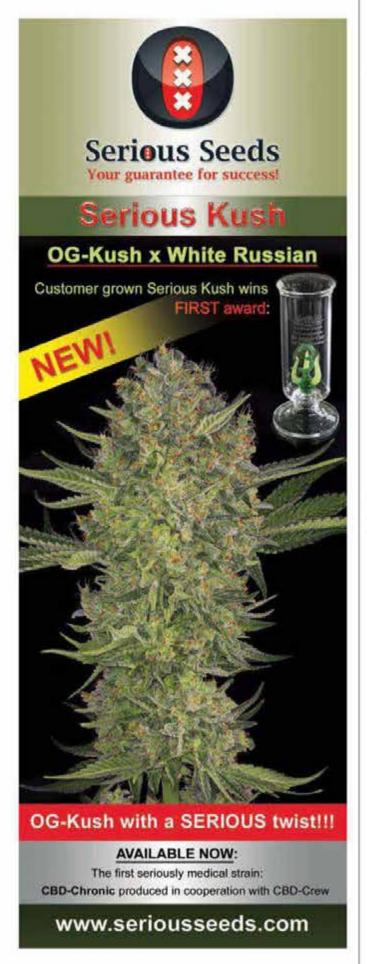
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Danko Tip: Carefully enter your grow space when the lights are off to inspect for light leaks.

fine when I go to sleep, but when I wake up they're either dead or almost falling down. Something is chewing the stem at the base of the plants. I noticed marks and some kind of little gray worms near the base as well. Could they be the problem? Please help me solve my dilemma.

#### Dear TJ,

The worms you noticed are precisely your problem. These are known as cutworms, and they behave in exactly the way you have stated. Cutworms are actually moth larvae that hide in the soil during the day and wreak havoc after dark. In one night, one cutworm can sever the stems of several plants.

Now that you've diagnosed the problem, you have to act quickly to avoid losing any more young plants to this menace. First, apply the dry biological control known as BT, or *Bacillus thuringiensis*, to the soil around the base of your plants. Totally organic, this powder will paralyze the intestinal tract of the soil-based larvae after they start to feed. Several other widely available parasites attack and control cutworm populations. Mail-order some of these beneficial nematodes and put them to work for you.

You can also create cutworm collars for the base of your plants to prevent this vicious pest from reaching its meal. Use cardboard tubes from paper towels or milk cartons and cut them so that they are at least two inches high around the base of the plants and firmly stuck into the soil.

#### SUBJECT: Pruning Stress

#### FROM: Chikondi S.

When I was a teenager, I was lucky enough to have spent some time in another country. Since then, it has been a dream of mine to be able to have the same strain I'd had the pleasure of enjoying when I was younger and to grow it as a "bonsai" to preserve its genetics. Now, amazingly enough, I've acquired those genetics! But they are all regular seeds (not at all an issue in regard to having to thin the herd later on), and my concern is that in the process of "bonsai-ing" them, they'll become hermaphrodites.

My plan is to do one major pruning and then switch to low-stress leaf removal from then on for the rest of the plant's life. But other than that, she'll be treated like a god among mortals and receive literally everything she could want. I'm at a loss and going in circles, so any help would be much appreciated.

#### Dear Chikondi,

So you're worried that your mother plant will turn hermaphroditic due to the stress of pruning. While it's true that stress can force a plant to induce both male and female flowers, it's far more of a genetic issue. Most hermaphroditic strains behave that way due to their genes or more serious stresses such as light pollution during the dark cycle.

If you grow your regular seeds out into sizable seedlings and then take clones and flower the clones, you'll be able to determine the sex of your seedlings without the stress of flowering them and reverting them back into the vegetative stage.

Once you've culled the males, you can prune your plants according to your plans without too much worry of them stressing out. As long as the plants are well lit and well fed, the



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Danko Tip: Mix nutrients into your watering solu-



occasional removal of leaves and offshoots won't cause your plants to turn hermi. Of course, if the clones you take from the mother plant show hermaphroditic tendencies, then the mom has them too and you must choose a different plant for your "bonsai."

#### SUBJECT: Burnt Leaf Tips

FROM: Jeffrey K.

**DEAR DANKO** 

l have a 17-day-old plant with burnt leaf tips. I haven't added any nutrients yet. Can you tell me what the problem is and how I can fix it? It's my first plant, so you definitely have more experience than me.

#### Dear Jeffrey,

It sounds like your soil may be too "hot," meaning that the medium in which you're growing already contains too many nutrients for your young seedling to do well. Plants don't need much food at all during the earliest stages of their lives, and too high of a nutrient level during this time is disadvantageous and can cause the symptoms of overfeeding that you describe.

Try flushing out your medium with plain pH-balanced water until a good amount has poured through your container. You can do this in the bathtub or shower so you don't flood your growing space. You should see your plants bouncing back in a short time.

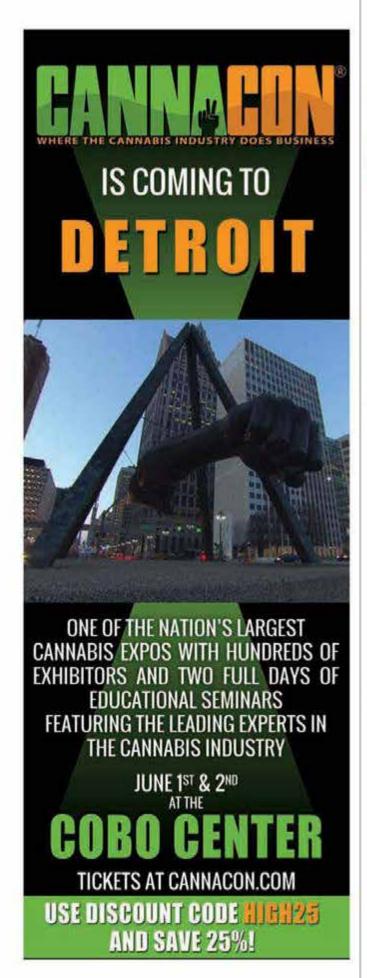
#### SUBJECT: Root Growth

FROM: Andrew

Do roots continue to grow and multiply during the flowering stage, or has the plant reached maximum root growth at the end of the vegetative stage? The reason for this question is that I'm trying to determine how long after transplant to induce flowering. If a grower went from a 1-gallon to a 10-gallon bucket, and then flowered a couple weeks later, would the root development continue well into flower, or is the extra space in that 10-gallon bucket unnecessary for flowering?

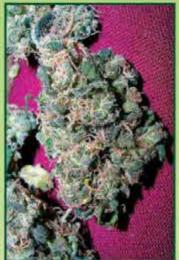
#### Dear Andrew.

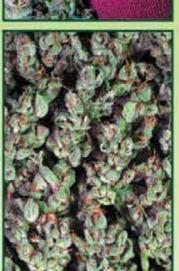
A plant's roots continue to grow throughout its entire life cycle. The roots will expand into the new medium quite rapidly, and your plant will grow accordingly. Plants that are root-bound before they begin flowering will have much smaller yields than those that have room to grow larger root systems. Remember the old adage: "More root, more fruit!" \*

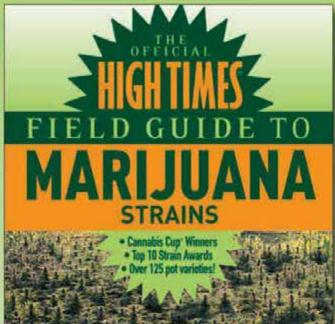


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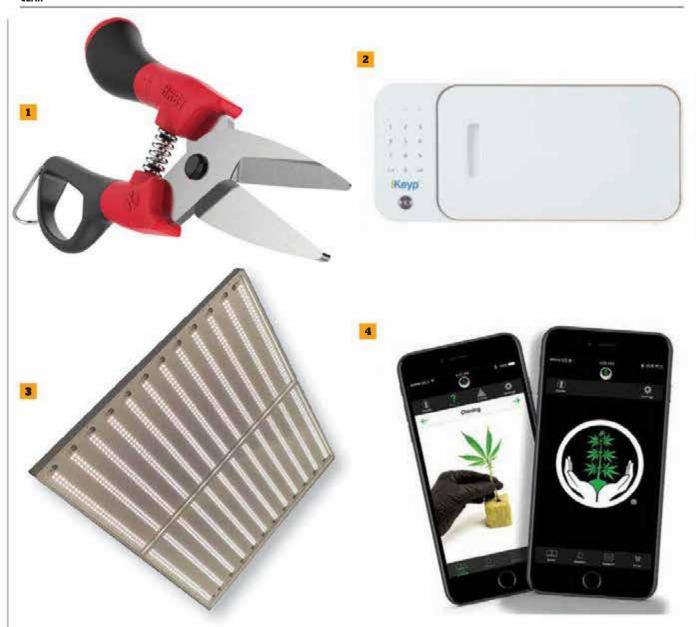
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TIMES

# THE FLORIST BY DANK FUNG

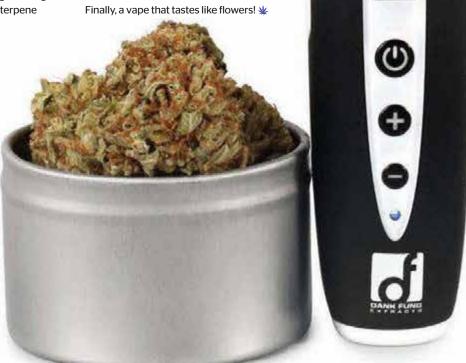
URNT POPCORN? A bagel that stayed too long in the toaster... or worse yet, an ashtray? If these are terms you would use to describe the flavor of your last experience vaping flower then we have some great news for you. Award-winning vaporizer designer Dank Fung Extracts has launched a revolutionary new pen that delivers the low-temp, high terpene, flavor explosions that their concentrate pens are known for.

This new vape is appropriately named The Florist and can only be used for well-ground, dried herb, which is gently warmed to the temperature of your choice, creating a custom experience that you dial in yourself—not one governed by arbitrary pre-sets. The team at Dank Fung says that they find 403° Fahrenheit ideal for most weed (for thicker clouds try 418° F), but by adjusting the up and down buttons you can find your best temp every time.

Dank Fung Extracts's vaporizers are designed by a team of extract artists who found themselves frustrated with the pens on the market and wanted to develop something that gave them a portable version of a high-end rig on the go. When you care about the terpene

profile of your concentrate, you hate to waste it in a bad vape pen—the same goes for top-shelf nugs. Their hard work and research was rewarded when their Executive Vaporizer (24k gold plated) was rated in the top 5 in *High Times* magazine's 2016 Annual Vape Pen Review, amongst rave reviews from other publications.

The next level for this crew of terpene-loving connoisseurs was obviously to tackle the challenge of creating a flower vape that would deliver like their extract pens do. Not an easy task, as we all have invested in various expensive herb vapes in the hopes of saving our lungs and enjoying tastier flavor. These usually end up forgotten in a drawer after a few tries. Unlike other pens on the market, The Florist succeeds in the impossible: capturing the fresh perfume of a green hit from a newly lit joint that we often miss when vaping. The Florist is also happily affordable, quick to recharge and discreetly concealable in one's hand. We love to see innovation from within the cannabis industry leading to these kinds of new products—no one cares more about flavor than people who grow or extract themselves.



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# **RASTA RELISH**

CANNABIS CONDIMENTS ADD A LITTLE BIT OF THC TO GRILLED SAUSAGES AND BRATWURST FOR SPECIAL SUMMER CELEBRATIONS. BY ELISE MCDONOUGH

**VERSATILE AND EASY** to dose, cannabis-infused condiments and sauces add valuable flexibility to medicated menu planning. In a social setting like a backyard BBQ party where some people want to eat weed and others don't, offering a clearly labeled cannabis-infused ketchup, mustard or relish empowers guests to choose their own adventure. This is an approach long favored by Chef Payton Curry, who has added CBD-infused Dijon and honey mustard and curry ketchup to the menu at Brat Haus, his German-inspired beer garden and artisanal sausage spot in Scottsdale, Arizona.

At a recent "Blazed & Infused" dining event, Curry rolled out his inspired strategy for medicated menu planning. Start with CBD cocktails and microdosed THC appetizers, and gradually increase the THC throughout the night. Getting CBD into the system first allows partygoers to enjoy their cannabis cuisine without getting overwhelmed by psychoactive effects, balancing the high with comforting calmness.

This recipe for Payton's pepper relish adds just a dollop of THC to grilled sausages and bratwurst, or as an accompaniment to cheese and charcuterie plates. You can also purée it for use as a sandwich spread. Using cannabis-infused olive oil means that this recipe will hold nicely in the fridge for months, and it's great to jar up a big batch and give this Rasta Relish as a hostess gift.  $\checkmark$ 

#### **INGREDIENTS**

3 tbsp. unmedicated olive oil 1 yellow onion, julienned 1 red onion, julienned 6-8 garlic cloves

2 red bell peppers, seeded and julienned

2 green bell peppers, seeded and julienned

2 yellow bell peppers, seeded and julienned

1 cup white wine

1 tsp. salt

1/4 to 1/2 cup cannabis-infused olive oil\*

#### **DIRECTIONS**

In a large pot, heat the unmedicated olive oil over medium-low heat for a few minutes, until you begin to smell the fragrance of the oil. Once the olive oil is hot, add onions, garlic and a pinch of salt. (The salt will draw out some water in the onions, preventing its sugar from being burned.) Cook for three to five minutes, savoring the amazing aroma of this classic combo!

Once the onions are cooked down, add peppers and cook for five to 10 minutes over medium heat. Don't try to brown the pepper mixture (you may notice a little on the bottom of the pan, which is fine).

After the peppers have cooked down, turn the heat up to mediumhigh and add the white wine. Cook until the wine has reduced nearly all the way, about 10 minutes.

Remove from heat and let cool. Place the mixture into the bowl of a food processor. Add salt and cannabis-infused olive oil and process until smooth. Allow to cool to room temperature before serving.

\*The potency of your relish will vary depending on the strength of your cannabis-infused olive oil.

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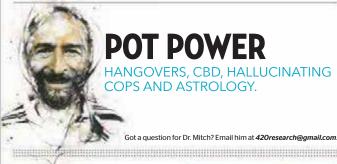
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#### ASK DR. MITCH



Is a weed hangover a thing? Is there any way to prevent it?

**BZ** Morning

Hi BZ.

Back in the 1980s, a Stanford researcher got a few guys high and had them do almost every test, including having them pretend to fly an airplane. There were some modest decrements, but I would hardly call it a hangover. If vou've got a lot of work in the morning, don't get high. If you want to keep brain fog to a minimum, make sure you vaporize, keep your dosage low and stay hydrated.

CBD gets me stoned. I swear. My friends don't believe me.

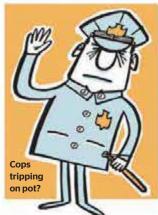
Lieutenant Weight

Hello Lieutenant, You probably aren't alone. At high doses (600 milligrams), we're seeing folks get relaxed and sleepy. Anxious people claim they fret less. There are even some data showing CBD can slow one's heart rate. Everybody's different. If your friends don't want any, that's just more CBD for you!

Local cops ate edibles and then claimed they were hallucinating. I've done some heavy brownies in my day, but I've never seen things. Are they just joking?

Laughing Outlaw

Howdy Outlaw, Not to malign the vocabularies of those who protect us-my friends at LEAP (Law Enforcement Against Prohibition) are delightfully articulate-but lay definitions of



"hallucinate" might not be the same as formal ones. Technically, hallucinating means perceiving something that is not there. Perhaps inexperienced users consuming huge doses would experience hallucinations, but very rarely.

Are joints so terrible for your lungs?

Derek (Roger) Moore

Greetings Mr. Moore, The ratio of lung irritants to THC in joints is actually pretty good, but they tend to burn very hot. A vaporizer set to a cool temperature is probably safer in the long run. If you're coughing, switch!

Is there a best strain depending on your zodiac sign?

Crazy Capricorn

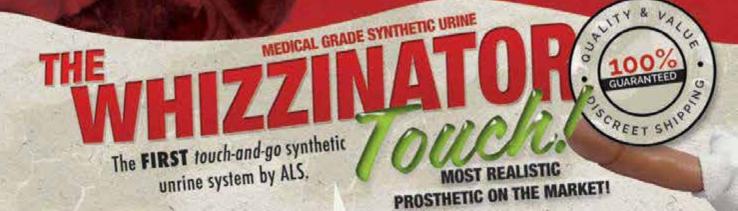
Hey Crazy, You'll be stunned to learn that nothing has been published on this topic. \*

Dr. Mitch Earleywine, PhD, is the author of Understanding Marijuana and The Parents' Guide to Marijuana.

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## MARIJUANA IN THE MIDTERMS

WITH THE 2018 ELECTION SEASON GETTING INTO FULL SWING, IT'S CLEAR THAT MARIJUANA WILL PLAY A CRUCIAL ROLE IN A NUMBER OF ELECTORAL CONTESTS.

Erik Altieri is executive director of NORML. Visit norml.org.



ARIJUANA LEGALIZATION IS going to be a lead issue in the 2018 elections. Advocating for an end to our decades-long failed prohibition is not only good policy, but good politics. Regulating the adult use of marijuana is currently supported by a majority of Americans from all political persuasions, and any candidate for local, state or federal office would be wise to advocate for the will of the people and make ending prohibition a core plank in their election platform. Supporting sensible reform to our nation's marijuana laws is not just overwhelmingly popular, it is the economic, scientific and moral thing to do.

With nine states having passed adultuse marijuana regulations, and 30 states authorizing medical-marijuana access, issues surrounding cannabis policy have taken center stage in local, state and federal elections. Over 90 percent of Americans support medical-marijuana access, and 60 percent support legalizing and regulating marijuana in a manner like alcohol.

If you look back at just the past year, it is clear that if we want the implementation of marijuana-reform laws to succeed, we need to begin voting out officials who are permanently afflicted with reefer madness and replace them

IT IS CLEAR THAT IF WE WANT THE IMPLEMENTATION OF MARIJUANA-REFORM LAWS TO SUCCEED, WE NEED TO BEGIN VOTING OUT OFFICIALS WHO ARE PERMANENTLY AFFLICTED WITH REEFER MADNESS.

with forward-thinking individuals who will fight for rational marijuana policies at all levels of government.

With a majority of states now engaging in activities that are in conflict with federal prohibition, it is absurd that House Judiciary Chairman Bob Goodlatte (R-VA), House Rules Chairman Pete Sessions (R-TX) and Senate Judiciary Chairman Charles Grassley (R-IA) refuse to even hold a hearing on this issue.

However, it is not just members of Congress who deserve our attention. With ongoing efforts to delay the rollout of legalization and regulation of marijuana in Maine and Massachusetts, mostly at the behest of those states' governors, we need to push 2018 gubernatorial candidates to take proactive and positive stances on marijuana policy. If you look to New Jersey as an example, which recently saw the exit of anti-drug zealot Chris Christie and the election of pro-legalization Phil

Murphy, you can see the positive impact a reform-friendly governor had on the tenor of the debate. Already, the state is moving to expand and reinforce its long-suffering medical-marijuana program, and Murphy's election catapulted the topic of full legalization to the top of this year's legislative-priorities list.

There are a number of races this year that are worth watching from a marijuana-reform perspective. In Texas, the opportunity to replace Senator Ted Cruz with pro-legalization Beto O'Rourke would add a new, outspoken supporter to the US Senate. In California, there is an outside chance that Democratic Senator Diane Feinstein, who long opposed our efforts despite the vast majority of her party now being in support of reform, could be ousted by current California Senate President Kevin de León, who has a far better record on cannabis issues. Also of incredible importance are the many gubernatorial elections being held, particularly in Maine, where the current governor (and ardent prohibitionist), Paul LePage, will be term-limited out of office. Governor LePage has spent every day since the 2016 election working to slow down or outright prevent the implementation of his state's marijuanalegalization initiative. We need to ensure that whoever takes the position after him is progressive and aggressive in implementing legalization.

Even on the local level, these elections have a huge impact. In Easton, PA, an effort to decriminalize marijuana failed in the past month due to just one vote, and counties in states that have legalization are often empowered to "opt-out" of allowing retail marijuana outlets in their jurisdictions. Local politics, in many ways, matters just as much if not more than what is happening at the federal level, and reform supporters need to be just as diligent in lobbying their local officials and candidates as those at the top of the ballot.

With the clock ticking down to Election Day, get informed, be sure you are registered, and go out and "smoke the vote" this November.

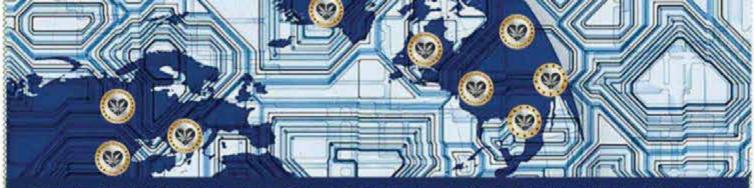


# IT STILL DOESN'T WORK.

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## CUTTING-EDGE CRYPTOCURRENCY

How The SYB Token Intends To Solve Every State's Cannabis Taxation Problem.

Scott Holtby is a freelance writer with a pulse on cannabis industries.

Many states are moving forward in legalizing access to cannabis for both medical and recreational purposes. A new multi-billion dollar cannabis industry has grown out of these efforts, with intense debate on who should benefit the most from the new economy. For example, should it be the pioneering activists or the new canna-entrepreneurs?

Either way, one thing has become clear:

States are eager to take their fair share as a reward for pushing through the necessary legislation and regulations.

States have a number of revenue streams available, from selling licenses to charging fees. But nothing compares in importance to the potential tax revenues from cannabis transactions.

Colorado has been leading the development of the legal cannabis model in the United States, legalizing medical marijuana in 2000 and recreational access in 2014. A report in CNN Money on July 19, 2017, quotes analysts predicting that state's cannabis revenues will surpass \$500 million by the end of the year. And Colorado only has 5.5 million residents.

It is no surprise that these strong early results have doubled down the interest of state regulators across the country. With legal access to medical and recreational cannabis markets growing in larger states like California, cannabis revenues could become a key contributor to any state's budget. This momentum is driving more support for legalization among even skeptics as the evidence continues to mount.

Despite success stories like Colorado, there remains serious suspicion among cannabis analysts and experts that states are missing out on a large chunk of potential revenue. This stems from the inefficiencies of the current sales market across the country. Since cannabis

is still a controlled substance from the federal government's perspective, large financial institutions like banks and credit cards have shied away from the market. This has led to a cash-based industry, ripe for underreporting and misrepresentation.

This lack of transparency is hurting all states' cases for greater legalization and access to cannabis markets from coast to coast. All states need a stronger and more efficient system to monitor cannabis transactions and collect taxes. And in an increasingly digital world, states must embrace innovative technology over cash-based systems.

Luckily one company is tackling this problem head on with the latest technology. Embracing Blockchain technology - like the kind that powers Bitcoin - Support Your Buds LLC is developing a cannabis-specific Cryptocurrency to facilitate transactions. But unlike previous attempts to integrate Cryptocurrency and cannabis, Support Your Buds is committed to solving the state taxation problem directly.

Support Your Buds is partnering with cannabis technology leader Alternate Health (CSE:AHG) to integrate their Cryptocurrency with the CanaPass controlled substance management system. This system facilitates transactions and payments between licensed producers, medical doctors and cannabis patients or consumers, keeping secure and transparent records for both the medical and recreational cannabis industries.

Most importantly, CanaPass's automatic tax reporting mechanisms can work together with the Support Your Buds Cryptocurrency to ensure states receive exactly the revenues and remuneration they are entitled to. With greater revenues, state governments have strong incentives to support patient access to cannabis and enact sensible legislation for all citizens in their jurisdictions.



## omen In Cannabis



Lauren Rudick Partner, Hiller PC Manhattan, NY

Lauren Rudick is a Periner at Hitler, P.C. in Manhattan, NY, and a member of the legal team that brought a tederal action suit against Attorney General Jeffrey Sessions and Chuck Rosenberg for a declaration that the mis classification of carmabig as a Schodule I doxy is unconstitutional.

What inspired your decision to accept the case against Jeff Sessions?

It was our brainchild. Michael Hiller (managing partner) and I attended a few meetings of the New York Cannabis Bar Association, consisting of a group of lawyers who sought to challenge New York's overly restrictive medical cannabis regulations. In thinking through various potential causes of action for that case, we realized quickly that the strongest claims were constitutional in nature, should be lodged against the Federal government, and belonged in Federal Court.

We then thought inrough all of the different ways that individuals and businesses are "damaged" or suffer with "irreparable harm" as a result of the unconstitutional classification of cannabis as a Schedule I drug, reached into our personal networks, and found our plaintiffs.

How do you address the argument against children using medical marijuana?

It really depends on the condition at issue, but I would encourage them to step outside traditional comfort zones, talk to physicians who specialize



## TIAL COIN OFFERINGS The Latest Trend in Cannabis Investing

Nick Swan is an avid Investor and advocate for Medical Cannabla Industries

It's no secret that Cannabis companies have faced unfair roadblocks over time, especially when it comes to raising capital using the traditional methods.

And they aren't alone in these difficult circumstances. But with some creativity and innovation in the cannabis community, new concepts are being adapted and developed that will change how companies raise money.

The most exciting new idea is the ICO, or Initial Coin Offering.

Companies use ICOs as way of selling investors up front participation in an "economy," generally at a discount, that allows them to benefit from future gains on a digital, Blockchainbased currency.

As Don and Alex Tapscott, authors of 2016's Blockchain Revolution. put it:

"The Blockchain is an incorruptible digital ledger of economic transactions that can

be programmed to record not just financial transactions but virtually everything of value."

Economies and markets built on Blockchain technology can function with a digital currency - or cryptocurrency - based transactions, with access to the currency initially launched through an ICO.

As Blockchain technology expands across the cannabis industry, new opportunities will be created for cannabis-focused cryptocurrencies.

For example, Alternate Health (CSE:AHG) has recently purchased a Blockchain-enabled mobile payments system to complement their CanaPass controlled substance management software. This technology ensures secure, transparent and trackable transactions in much the same way an ICO is used to raise capital.

At the end of the time limit or when the full number of tokens

are sold, and the currency is live can be used for transactions. Investors can spend it, sell it or hold on to it for future gains.

Often this way of raising capital for Cannabis companies can be a more independent, transparent and quicker method for companies to get funding. For investors the important thing, as always, is to do your research to make the best of your investment in this dynamic industry.

The coins or tokens in question can appreciate in value just as stocks do in the public market, while the company making the offer generally uses the capital to fund their business. But unlike an IPO that offers a stake in the ownership the company itself an ICO sells a right of ownership or royalties to a project.

This technology ensures secure transparency with the potential to integrate digital currency transactions as the crypto-cannabis industry evolves.

Visit: Alternatehealth.ca

## Take Note How Do Investors / **Buy Into** An ICO

Many ICOs are based on previously existing cryptocurrency like Ether There are a number of online exchanges, so do some research and sign up for an account with an exchange that

support's your ICO of interest.

Transfer USD, EUR, CAD or

any relevant currency from your bank account to your registered account with the exchange. Use this capital to buy Bitcoin, Ether etc.

txchange

Create a digital wallet under your control where you can move your coins unless the ICO you wish to participate is offered on your exchange. Many start with an Ethereum wallet as most token sales take place through that network.

No two ICOs are identical. but there are key similarities. A timeframe will be laid out with a number of tokens being offered. Most ICOs will have detailed instructions on how and when to participate along with all agreements inherent in the purchase.

in treating pediatric patients with medical cannabis. and talk to parents, and the childrenwho rely on when many of the medications medical cannabis can replace have disastrous, proven side effects.

Why is this case pivotal for the Canna?

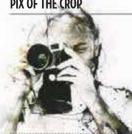
We are at a tipping point, where more than half the nation believes cannabis should be legal and lives in California is on the verge of full legalization (which is the 5th largest economy in the world, after Brexit),

the government has already declined to enforce the Controlled Substances Act against state-compliant medical cannobis businesses and individuals and has de-funded the DEA accordingly, sophisticated economies globally are recognizing benefits of legalization, and the campaign of misinformation has been largely debunked and overshadowed with has been hurt and divided since last November, but the legalization of cannabis stands to unite everyone. and patient advocacy. And from the right, we will address states' rights, and our constitutional guarantee to be free from congressional overreach. The criminalization and stigmatization of cannabis is an injustice that makes no rational sense, and the American people are waking up to that.

What's overarching reason behind the lag in the nation-wide legalization of Cannabis?

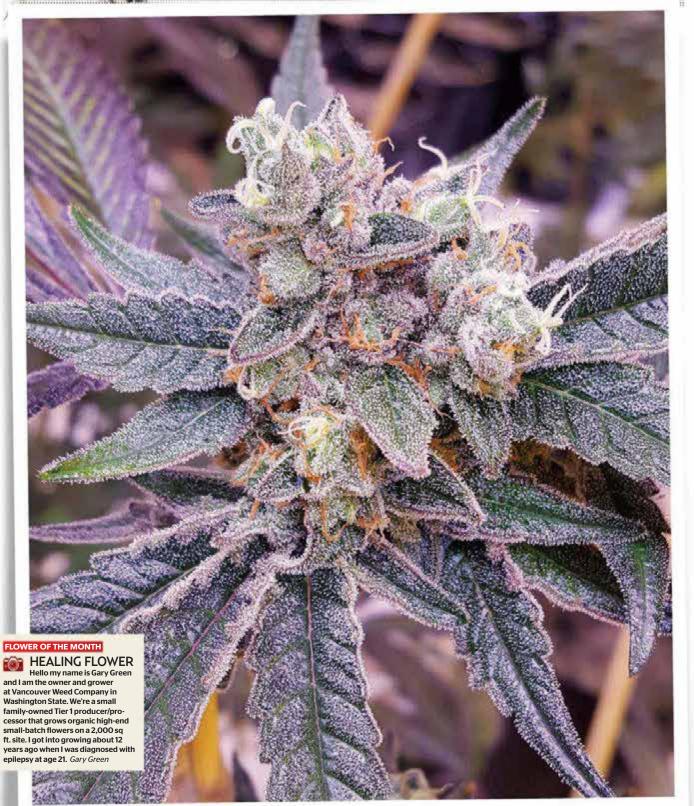
Hearts and minds need to change, and education is the key. We've been suffering with a political campaign, rooted in racial animus, deliberately designed to mislead the American people with regard to the safety and medical efficacy of cannabis.

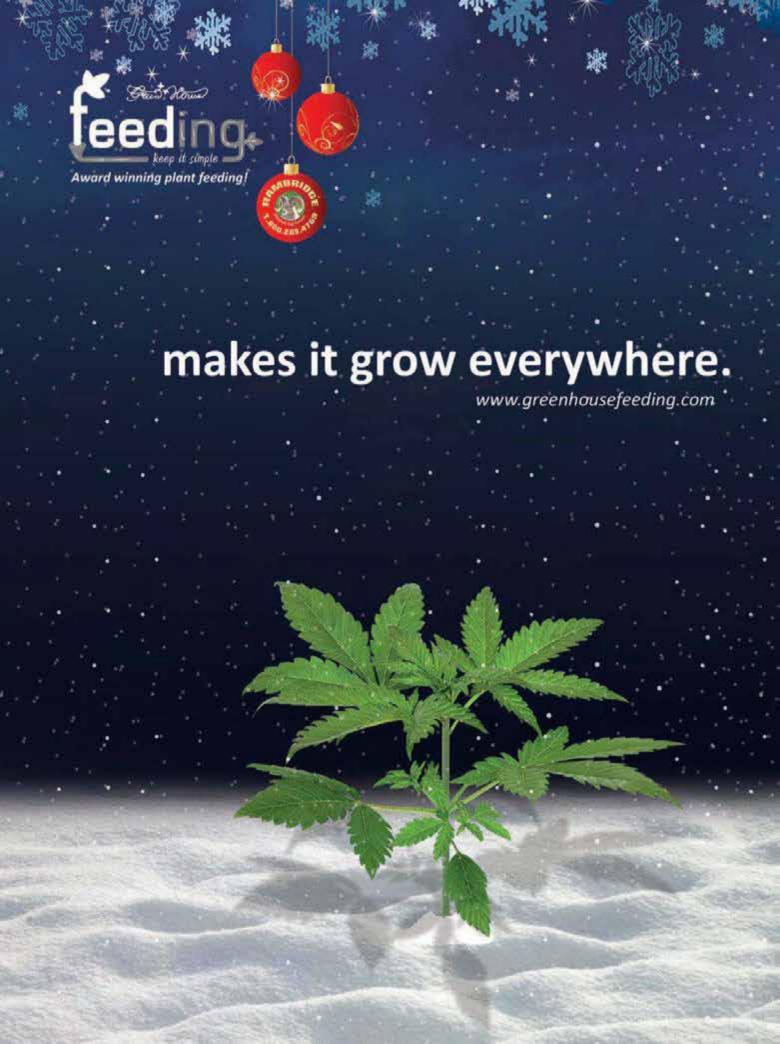
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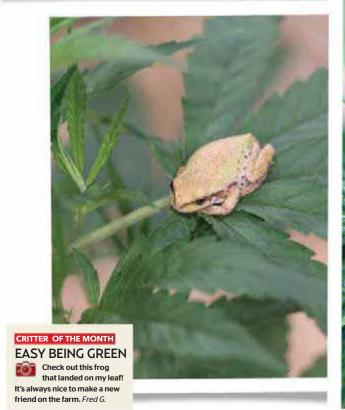
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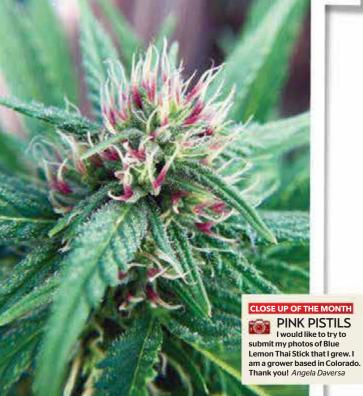
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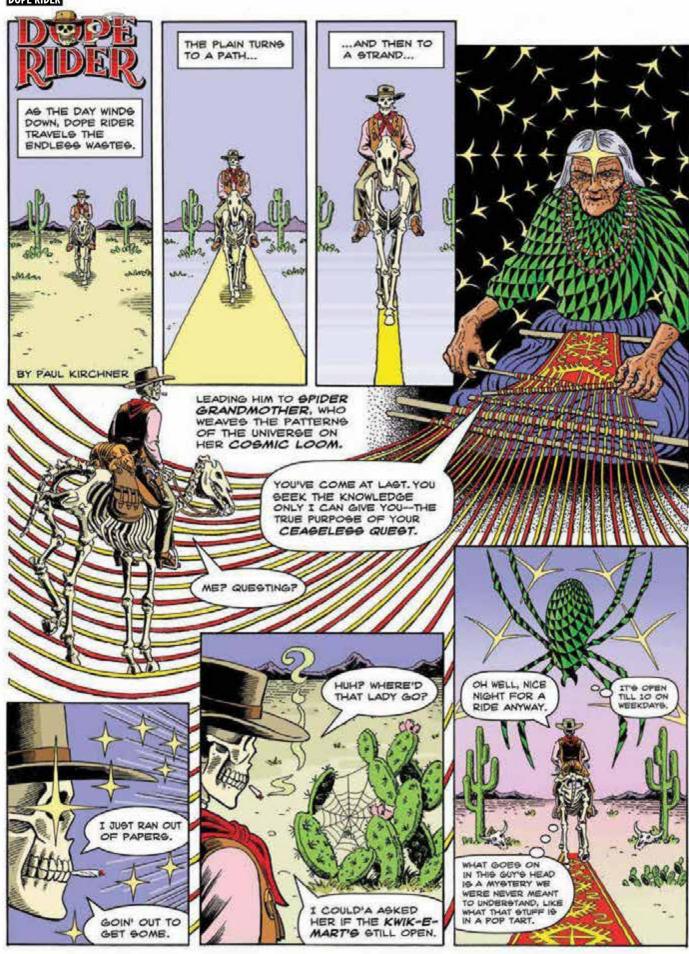








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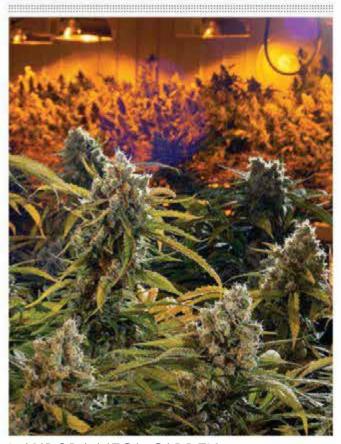
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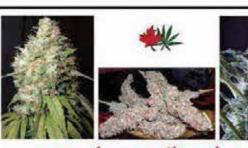
Trying over and over to successfully root cuttings of a pot plant can try a grower's patience and destroy their confidence. We highlight the important factors for proper propagation of clones from beginning to end to ensure a favorable and flavor-able outcome.

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Get the most out of your garden with tips and tricks for bigger (and better) yields from High Times's cultivation experts. Whether you're a first-time grower or an experienced cultivator, it's time to get more from your grow.

#### POT IN URUGUAY

In 2013, Uruguay became the first country in the world to legalize cannabis, eventually establishing commercial sales and a grow-yourown component of the law. We check in on the South American nation and its trailblazing marijuana legislation.





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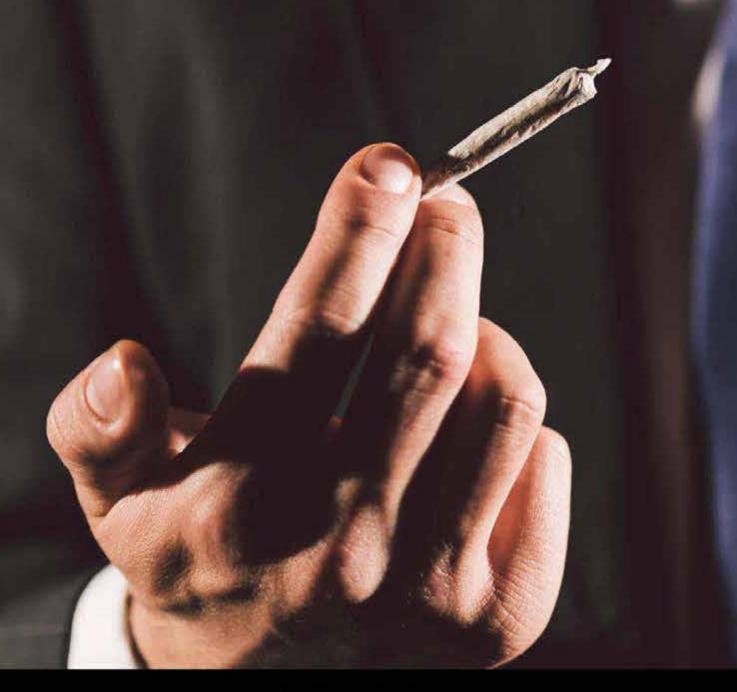
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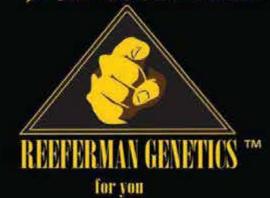
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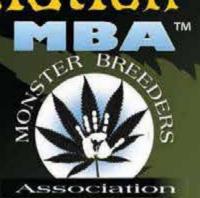




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Acquisition of live cannabis seeds is illegal in the United States



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BEST CUSTOMERS POTRESPONSIBLY BEST SELECTION SELECTION



