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## From the Editor

If you've ever been hiking in the mountains, you'll know it's worth the occasional break on the way to the top to take in the scenery and appreciate the journey you have traveled. I think there's an analogy there with our industry.

When it's busy season, our focus is always on the next step toward producing quality products for our customers. The days are long. The work is hard. The expectations are high.

Part of the idea behind this publication is a recognition of where our industry has been — like stopping at an overlook in acknowledgement of where we stand today. Within the pages of this magazine, we aim to provide key industry trends, expert insight and photos that highlight the work you do every day.

Many of you are receiving a copy of this first edition of MulchMatters at the Mulch & Soil Council's Annual Meeting. The industry has come together for this conference every year for the past 54 years, when eight people formed the association in 1972. Mulch and soil producers, and the businesses that support them, have come so far since then.

I want to give special acknowledgement to Bob LaGasse, the Council's executive director who has served in that role since 1982. In that time, our industry has seen extraordinary growth, new applications and breakthroughs in equipment and colorant. The Council has been at the forefront, providing standards and product certifications along the way.



As someone who has also spent decades working in this industry, it's exciting for me to see the innovation and ever-improving products we continue to produce. This publication is dedicated to everyone who does the groundwork. I hope you enjoy it and find it beneficial to your operation.

On common ground,

KENT ROTERT  
VICE PRESIDENT, COLORBIOTICS



MULCH EDUCATION

## TIPS OF THE TRADE

# Help Consumers Understand Wash Off

An industry-wide headache for mulch producers concerns a problem they didn't cause but one for which they are routinely blamed.

Too often, colored mulch loses some of its color when exposed to water shortly after being put down in a landscape setting. It is not due to the quality of colorant. It is not the result of careless work on the mulch yard. Rather, it is a reality that bagged mulch products will always contain moisture.

The solution is simple: colored mulch needs a day to dry to retain its optimal appearance. While this is no mystery to producers, educating customers and end users on this practice can improve their experience, reduce misplaced blame and position that producer as a trusted mulch expert.

"The number one complaint we get from the field is related to wash off," says Nick Lincoln, national sales manager at Colorbiotics.

**"Most consumers don't understand that mulch needs a full day to dry in a landscape setting for color to properly adhere to the mulch."**

NICK LINCOLN

Properly drying the product does not require labor-intensive efforts, such as putting down a tarp or giving the mulch a day to sunbathe on the driveway. Instead, it's a matter of checking the forecast, and if dry, putting down the mulch where the customer intends to have it. The colorant will adhere on its own.

"Rain is the biggest risk, but there are a lot of other factors to think about as well," Lincoln says. "Sprinkler systems need to be

turned off to make sure they allow the mulch to dry, and mornings with a lot of dew — and dew through the evening — can really delay the drying process. You always want to make sure to put mulch down in dry conditions."

The color loss from wet mulch is striking and provides consumers a simple reason why they should give bagged mulch time to dry.

Informing consumers about the risks of wash off guards the integrity of the business's product and helps the end user enjoy colored mulch as it ought to look.

SCAN THE QR CODE  
WATCH A SIDE-BY-SIDE  
DEMONSTRATION ABOUT WASH OFF



A SIDE-BY-SIDE DEMONSTRATION HELPS ILLUSTRATE THE DIFFERENCE IN WASH OFF BETWEEN WET MULCH AND MULCH GIVEN A FULL DAY TO DRY.

## How Quality Control and Testing Ensure Fair Competition

The Mulch & Soil Council (MSC) sponsors annual meetings where connections can lead to opportunities. That mission took on a new significance in 1996 when the mulch and soil industry faced difficulties concerning the truthfulness of weight labels.

"There was a lot of short packing going on," Bob LaGasse, the MSC executive director, explained. "It's a commodity market. If you add a penny to a bag, you can lose a contract."

The MSC approached the National Institute of Standards and Technology (NIST) to run an audit of the industry. Over the course of three weeks, NIST traveled to 15 states and inspected thousands of products for short packing, finding 80% of the inspections failed.



To address the problem, the partners developed a training program that included guidance on bag-filling technique, package testing, measuring and more. For two years, they trained the industry on these procedures. In 1998, the MSC went back to NIST and asked to be checked again. This time, 20% failed.

"None of the 20% were members," LaGasse said. "So that was kind of the first true demonstration that working together, we could solve a problem."

Once mulch colorants were introduced, they were blamed for a contaminant found in the marketplace: a pesticide called chromated copper arsenate. Further testing by the MSC revealed the colorants were safe. The real issue stemmed from the mulch that was being colorized, but no one had tested for that.

This lack of regulation became the driving force in the development of the MSC Product Certification Program. Launched in 2003, the program helps consumers, retailers, regulators and others identify products that conform to the Voluntary Uniform Product Guidelines. Products that pass the review and comply with the continual audit testing earn the badge of MSC certification logo for their packaging.

"That's why the certification program is there to assure consumers this thing meets standards," LaGasse said. "This is a company that's willing to have its product inspected and it's going to conform to standards."

## KNOCK ON WOOD: FINDING THE RIGHT SOURCE

Wood is truly the foundation for mulch. Its characteristics have a big influence on appearance, longevity and consumer demand.

As producers choose the right wood source to bring into their operation, there are multiple factors to consider. To start, how well does the wood hold colorant? This is often related to how long it's been able to rest. Most wood sources require a resting session of at least a month after being ground, giving it enough time to recover from the "shock" of the grinding process.

"After you grind up wood, it puts the wood into shock and it wants to leach out all the tannins and oils in the wood," said Nick Lincoln, national sales manager of Colorbiotics. "Do you think wood in this state accepts color very well? Definitely not."

It's also important for producers to keep in mind how long a wood type will hold color. Mixed hardwood mulch is made from multiple

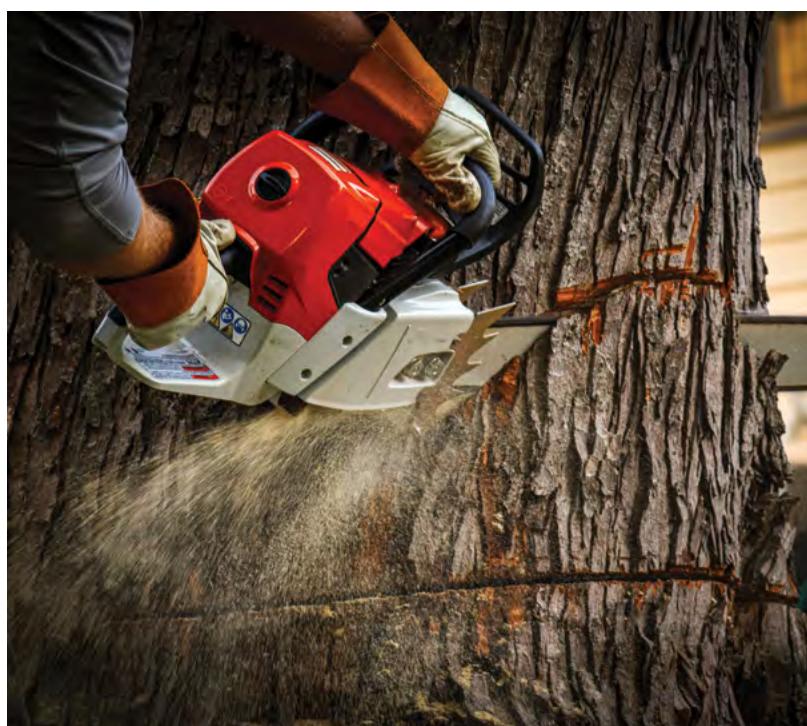
types of hardwood trees and doesn't age as fast as a bark mulch variety.

Consumer preferences have a big impact on wood sources. The largest market in the United States is the National Capital Region, which includes the metro areas around Washington, D.C. and Baltimore.

The region is replete with stately homes and an emphasis on premium landscaping, so hardwoods like oak, maple and ash are king. But wood selection is heavily influenced by location. Currently, hardwood mulch holds the lion's share of the market across the United States, but softwood mulches like pine bark and cedar are gaining popularity.

It's common for producers to use multiple wood types in their operations. Expanding practices to use green waste, recycled materials and wood clearing can help producers increase their mulch varieties and meet consumer demand.

Color loss is inevitable but can vary based on wood types used in the product. Wood selection is integral to a mulch operation and has an impact from coloring to consumer satisfaction.



# How Colored Mulch CHANGED THE LANDSCAPE

The sight of colored wood mulch stacked outside lawn and garden stores is so common it can be difficult to appreciate the unlikely journey of the past half century. Through necessity, creativity, innovation and a bit of good fortune, the mulch industry truly transformed the landscape of daily life.



ROGER UNDERWOOD

CO-FOUNDER OF BECKER UNDERWOOD

Like many businesses, the mulch industry began as an indirect result of government regulation. Decades before covering front lawns, businesses and public spaces the world over, wood chips were considered a waste product and burned, along with sawdust and tree bark.

That changed in 1970, when the Clean Air Act required a dramatic shift in the way the lumber industry handled the leftovers from sawmills. The prohibition on burning unwanted bits of timber resulted in accumulating piles and a need to find a new outlet.

Pioneers of what later became the mulch industry realized the previously unwanted wood chips provided moisture control, erosion control and weed control. They turned to the lawn and garden market as a way to repurpose the wood chips for beneficial use.

## COLOR VISION

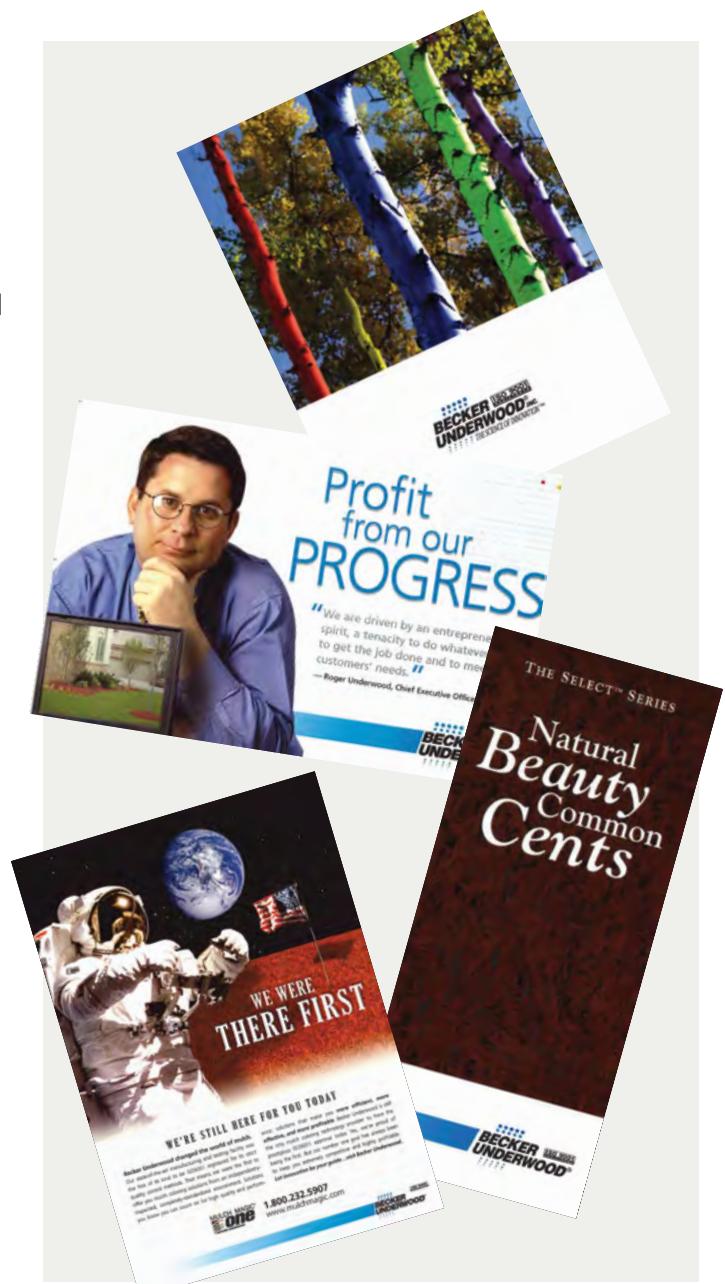
While consumers slowly began to embrace wood mulch as a landscaping solution, the range of products available today would have been unimaginable in its early history. As little as a generation ago, colored mulch was more a novelty than the norm.

Roger Underwood, co-founder of Becker Underwood, recalls a marketing project in 1986 that took a twist. The intent of the photo shoot was to capture images of a temporary blue spray indicator designed for pest control technicians.

The wind blows where it wishes, and the overspray landed on faded mulch nearby. "Well, this isn't going to look good – blue mulch," an employee remarked.

After thinking it through for a moment, he continued. "Maybe we should have a colorant that's brown so it would look better on the mulch."

It was a lightbulb moment – coloring mulch. No such industry existed, no consumer was demanding it and it may have been the first time any business seriously pursued it.





## UNCHARTED TERRITORY

It's not to say it came easily from there. Early efforts focused on a topically applied colorant. The idea was to sell it in bottles directly to consumers. The marketing pitch was centered around spraying faded mulch instead of buying new mulch every spring. Customers kept choosing to buy new mulch.

Eventually, Becker Underwood – a company that later became known as Colorbiotics – created a product called Magic Mulch PF, a concentrated formula sold in 30-gallon drums. The early customers were wood recyclers. Pallet material waste was the most common product for application.

By the late 1980s, some professional mulch companies saw the benefit of their mulch's

appearance lasting into the next year, and they purchased the colorant. Colored mulch started to find its footing, even if it took baby steps in the early days.

## QUESTIONS AND ANSWERS

By the mid 1990s, colored mulch was somewhere between an experiment and a must-have landscaping product. It did not enjoy universal praise.

"There were a lot of questions," said Bob LaGasse, executive director of the Mulch & Soil Council. "There was a lot of skepticism and some downright scorn at many points."

There were questions about the chemicals used to make colorant and whether runoff was safe for other plants.

There were questions about the longevity of various products. And certainly, there was a question of profitability for producers, given extra pennies per bag could cost them a contract.

While colorant formulas varied by manufacturer, there was some commonality in how colorant was applied to wood chips. Mulch generally ran through something like an auger, got dunked in colored water and dropped out the other side. It was a messy recipe. Water and color streamed across mulch yards, and with them, lost money and resources due to inefficiencies.



## MULCH MACHINES

Having pioneered the mulch colorant, Becker Underwood saw a need to build a machine fit for purpose.

The crude machines employed to get colored mulch in motion were insufficient for a growing market demand.

Mulch is dense, and it has to be colored in high volumes. That requires specific types of motors and augers. New equipment tailored to the industry would also enable a more consistent, precise product.

In 1996, Becker Underwood released its Paddle Mixers capable of producing 80 to 150 yards per hour. Significantly, they employed bilateral agitation to maximize water and colorant distribution.

The company sold hundreds of units to producers who recognized a new playing field for the industry.

## GLOBAL IMPACT

The mulch business has come a long way from its inauspicious beginning, and later, accidental step into colorant. Today, more than half of all wood mulch is colored, and landscape stores from Alaska to Argentina carry the products.

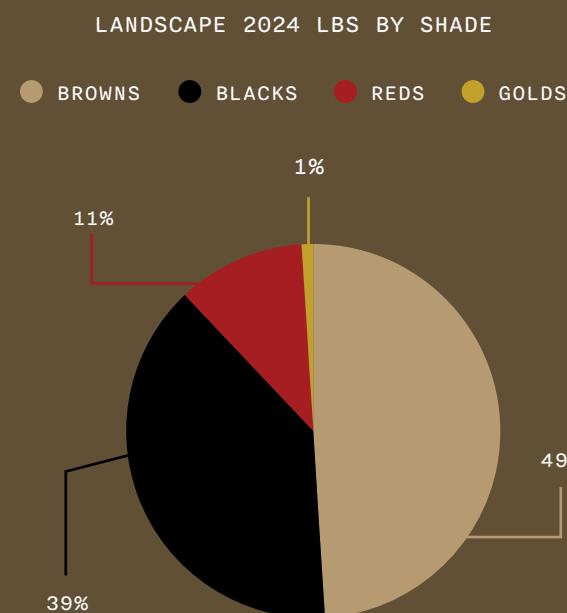
"I was recently in Johannesburg, South Africa, and at the airport there was colored mulch," Underwood said. "I just tipped my hat and said out loud, 'Thanks for the business.'"

While no longer in the mulch business, Underwood still reflects on experiencing firsthand the early days of coloring wood mulch and watching it improve and spread to consumers all over the world.

"My co-founder, Jeff Becker, and I were just two average kids from a small farm town in western Iowa," he said. "We're pretty humbled by it all."

# Color Trends

No matter the state. No matter the region. A clear trend in mulch colorant preferences is remaking neighborhoods across the country. "Right now, brown and black are king," said Brad Blickley, a Colorbiotics territory manager based in the Midwest. His counterparts serving customers across North America report the same shift.

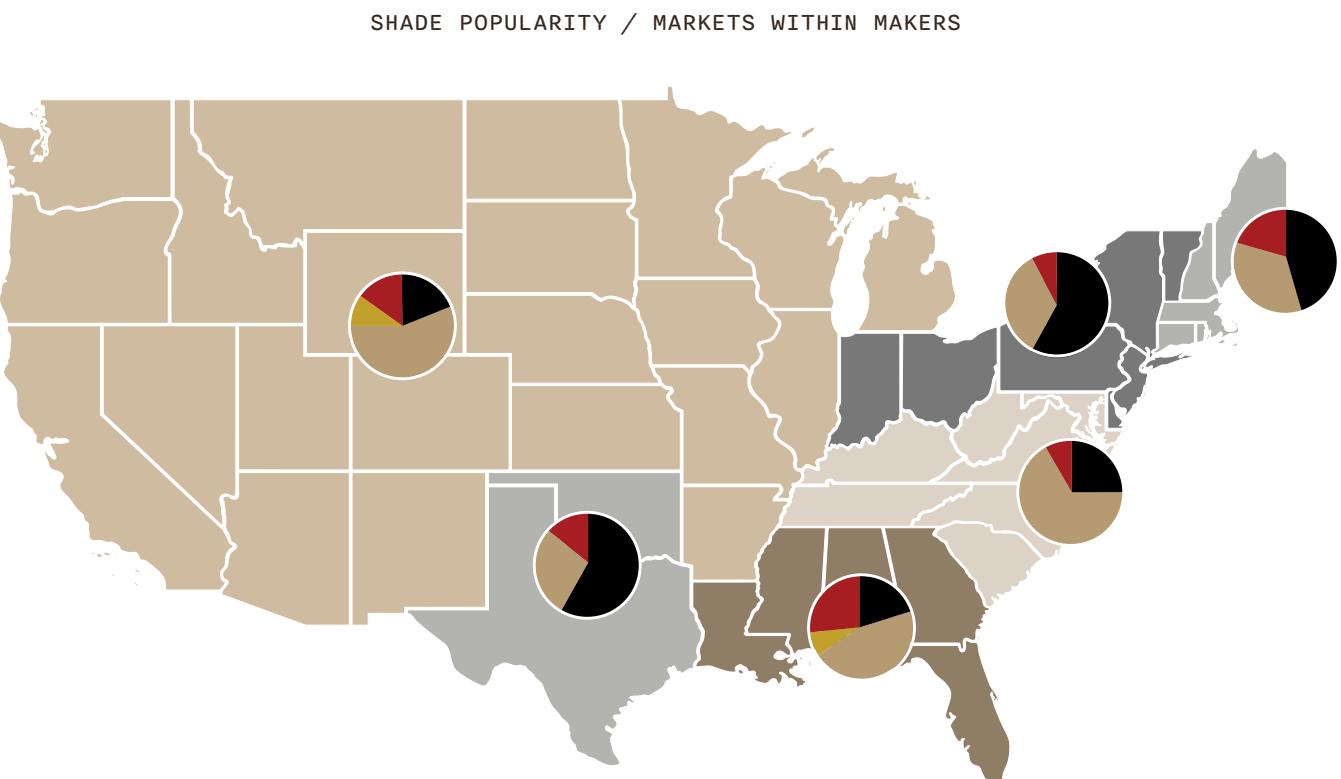


## ENTERING THE DARK AGE: A SHIFT IN COLOR CHOICE

"In the last two years, we've seen a big trend toward black," said Chris Ingalls, a Colorbiotics territory manager who's based in Georgia and covers the Southeast. "If one neighborhood does it, every other one seems to follow that trend, and you see a big uptick of that color."

10-YEAR SHADE TRENDS

YEAR	BLACK	BROWN	RED
2014	28%	45%	26%
2016	28%	46%	26%
2018	28%	47%	23%
2020	33%	48%	20%
2022	36%	48%	15%
2024 YTD	39%	49%	11%
% CHANGE	+39	+9	-58



**"If one neighborhood does it, every other one seems to follow that trend, and you see a big uptick of that color."**

CHRIS INGALLS

Over the past 25 years, as colored mulch gained popularity, regions of the country developed distinct preferences. One area would prefer shades of red, while another would go for browns and to a lesser extent, golds. But industry leaders have noted a blurring of the regional lines in the last couple of years. Darker colors have become the dominant color across the country.

For producers, the trend toward darker shades presents an opportunity to reach neighborhoods making the switch, as everyone tries to keep up with the Joneses.

Another possible factor in the changing preferences is that a lot of new construction features white homes with dark roofs, and the rich-soil appearance of black and brown mulch complements these exteriors.

Danny Smith, a Colorbiotics territory manager who serves Virginia and the Carolinas, has witnessed a big swing during his more than two decades selling colorant. "When I started, red was number one," he said. "Now, browns continue to grow and black is increasing. We never used to see black even eight years ago."

In the Northeast, some sales managers estimate black colorant now accounts for almost two-thirds of sales, with darker shades of brown also on the rise.

While societal divisions make headlines, one trend is uniting neighborhoods: black and brown mulch are covering a lot of ground.

## Weight and See About Water Usage

Pennies matter in the mulch and soil business.

A single cent per bag can be the difference between winning and losing a contract.

Despite the slim margins, one essential component on the mulch yard is often under appreciated for its impact on the bottom line: water usage.

About 20% of the cost of every bag of mulch is freight. The answer to reducing these freight costs lies in water reduction. Using less water during the mulch coloring process results in less weight when bagging the product.

The effects are compounding: less weight enables additional pallets per truckload; extra pallets per truck mean fewer trips required to make deliveries; fewer trips save on hours and wear and tear on the fleet.

Producers who have achieved this kind of water reduction have gone from 15 pallets per truck to between 18 to 20 pallets. Modern mulch coloring systems have helped achieve these efficiencies. A trommel may require about 20 gallons per yard, but leading machines can reduce that by 50% or more.

There are several indirect benefits to water reduction as well. Using less water often means less colorant is required for the mix. It enables the product to dry quicker and reduces the risk of mold. It makes bags a more manageable weight for the end user to carry from vehicles. And, in some drier regions that have begun to track cumulative usage, it helps the producer comply with local sustainability goals.

SCAN THE QR CODE

CHECK OUT A REAL-WORLD EXAMPLE OF WATER REDUCTION



### OUT WITH THE MOLD

Mold creeps in when three factors align: moisture, warmth and darkness. While heat and darkness are unavoidable realities on mulch production yards, the steps listed below are factors within a producer's control.

#### 1: REDUCE WATER USE

Water reduction tops the list for reducing the risk of mold. The drier the mulch is during the coloring process, the quicker it completes drying in a landscape setting. Machines specifically designed to color wood mulch can dramatically reduce the water usage compared with a trommel.

#### 2. GIVE IT A REST

Another important factor in reducing mold is aging wood for a minimum of a month after the primary grind phase. Once ground the first time, organic activity on the wood spikes. This creates an environment for mold to thrive. After about a month, the biological activity tends to drop, and the wood can be ground again and colored.

#### 3. WOOD TYPE MATTERS

Species of wood also plays a dramatic role in the presence of mold. Hardwoods, fruit and nut trees and citrus trees tend to mold the worst. Softwoods, like pine and spruce, tend to mold less.

#### 4. FLIP FOR IT

Time and space are in short supply at most mulch yards, but flipping piles of colored mulch to expose them to sun and wind is a bonus. Combined with these other tips, mulch producers can significantly lower their risk of mold and create a domino benefit that extends all the way to the end user.

## A Fine Fit

The smallest bits of wood carry an outsized influence within the mulch and soil industry.

By growing numbers, bag producers are screening out fines, generally characterized as pieces of wood that are smaller than 1/4 inch, as a matter of cost savings. Fines absorb more water and colorant than the rest of the wood mulch, which adds to the freight cost.

The resulting savings in both colorant and shipping makes their exclusion a common practice.

Another reason for screening fines is that businesses have a use for them. Many bag producers also bag soils and compost, which are perfect fits for fines. A lot of bulk producers, by contrast, do not have another outlet for fines, so they remain in the mulch.

The inclusion of fines in wood mulch meets a growing consumer demand. The smaller pieces create a more uniform look compared with wood chips that may be several inches long. The industry has responded by shifting to a smaller grind — a trend seen across the country. By some estimates in the Northeast region,



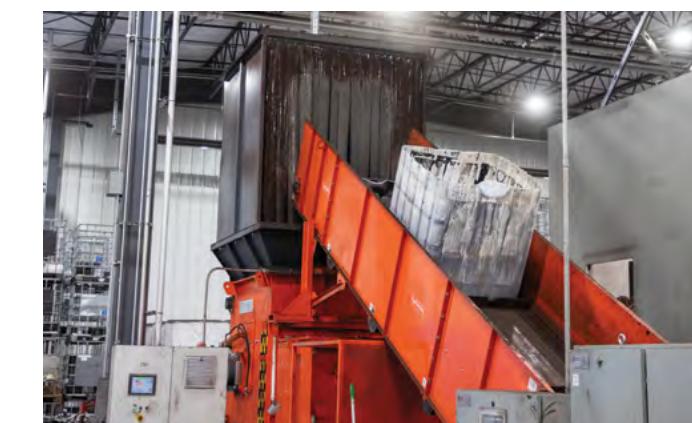
as much as 60% of the overall weight of a yard of mulch is fines.

Mulch producers have multiple financial and consumer considerations to balance when considering how to manage fines. One thing is clear: fines are no small matter.

## TALKING TOTES

Once a plastic colorant tote is empty, it doesn't have to be thrown away. Save your totes and save some money with these ideas:

- Recycle with Colorbiotics
- Sell or trade them for cash
- Grind up the plastic and sell the metal cage
- Smash them



**HAVE QUESTIONS? GIVE COLORBIOTICS A CALL AT (888) 663-6980 AND THEIR TEAM OF EXPERTS WILL BE HAPPY TO WORK WITH YOU.**

# What is your safety culture?



**ALL COMPANIES HAVE (OR SHOULD HAVE) SAFETY PROGRAMS WITH TRAINING, VIDEOS AND TESTS TO HELP ASSOCIATES WORK SAFELY.**

This provides a good baseline to identify hazards, address required regulations and call attention to site-specific issues. But what is the safety culture at your facility?

When I meet with prospective job applicants, I ask them, "Can you tell me about any accidents that you have seen or heard about at a previous job?" Without fail, the group recalls examples from minor to fatal accidents.

Then I ask whether they had safety training. The response is "Yes," but the applicants often clarify that the safety guidelines were not followed in the circumstances around the accident.

With real-life examples of accidents and feedback that safety training alone did not prevent them, I dive a bit deeper in the discussion. "Who is responsible for safety?" Posing this question to the group of applicants, I hear a variety of opinions on who should be the responsible, including management, supervisors, safety staff, or even the equipment manufacturer. When asked if they thought there would be an accident in their former workplace, it brings out a strong affirmative response.



They describe people taking shortcuts to safety protocols, driving too fast, or simply not following the rules. These individuals had seen it and expected an accident would happen one day.

Another critical question is this: "What if your loved one were injured at work, and the 'word on the street' was that they knew someone was going to get hurt because associates were not working safely?" A family member could ask, "How could this have been allowed to happen?"

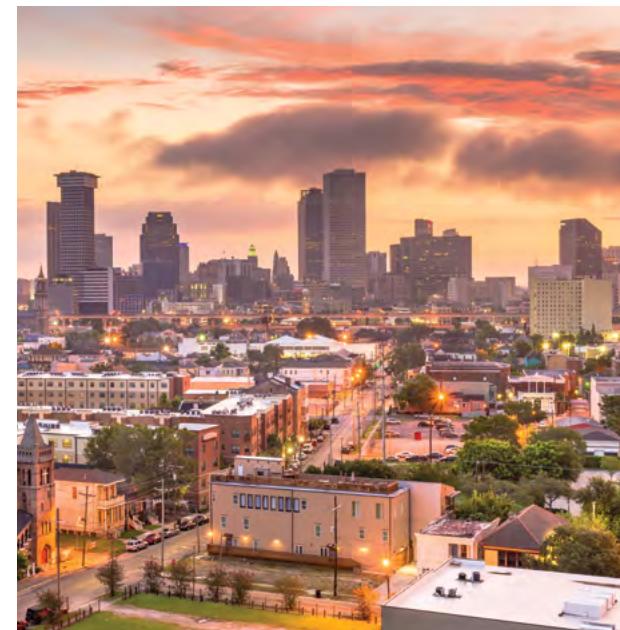
If all are trained how to work safely, and there is knowledge that some not are not following safety protocols, why are they allowed to continue to work and put others at risk?

Speaking to these groups, I make it clear that safety is everyone's responsibility. This draws frowns from some because they know where the discussion is going. The root cause of the frowns is fear of peer pressure or retaliation when reporting unsafe acts or the coworkers engaging in them. But the bottom line is this: you don't want your loved one to be injured, so you expect someone to step up and do something. And that someone means anybody working at the jobsite.

The playbook of safety rules works when everyone on the team follows the protocols. Watching a video is not enough. When a worker has a dangerous work habit, the team should react to protect themselves and others. Safety culture is not about the company, the rules, regulations, or even costs. Safety culture is about every individual – each deserves to go home after work.

Let me assure you, it pays off. I worked at a mulch and soil plant that has gone more than 30 years without a lost time accident.

What is your safety culture? Our associates are our most valuable asset. Do some extra audits; ask your team if the workplace is safe. Attracting and retaining good associates will be easier when your safety culture is solid.



## SAVE THE DATE

**The Mulch & Soil Council's 2026 Annual Meeting**

September 29 - October 1, 2026  
New Orleans, Louisiana





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