







# **Peat Moss**

- Using peat moss has a steep environmental and ecological cost.
- Many gardeners might not realize how using peat moss impacts the sensitive ecosystem of the peatland and fuels a warming planet.
- Peat bogs are a unique ecosystem. They are considered by some scientists to be as important as the world's rainforests.
- Peat harvesting massively accelerates climate change.
- But perhaps the most vital service peatlands provide is carbon sequestration.
- ! Peat bogs capture and hold carbon dioxide and prevent it from entering the atmosphere. They are the most efficient terrestrial carbon sink on the planet, holding around 30% of the globe's soil carbon. More than all of the world's forests combined.



- Beyond Peat Professional Organics have been used in the professional horticultural and agricultural markets for over 10 years by the leading growers in the US
- Beyond Peat Professional Organics focuses on utilizing sustainable renewable highquality ingredients that out-performs what is in the retail market today
- All Beyond Peat products contain innovative and patented Bio-Fiber Technology that is proven to outperform sphagnum peat moss in all growing environments
- Gro-Well is exclusively bringing this innovative technology to the retail marketplace.











Bio-Fiber® is an innovative soil and growing technology that provides an environmentally solution to the horticultural and agriculture industry. Our products are listed for organic use under OMRI standards, certified 100% All Natural and Organic, and produced from 100% renewable plant fiber resources. Bio-Fiber® availability is consistent and not impacted by weather, and in most cases can be locally/regionally sourced. It is truly an innovative ingredient solution for a variety of applications.













Providing a sustainable alternative to traditional peat moss, Beyond Peat™ Professional Organics soil mixes are researched and developed by leading horticultural experts and trusted by commercial growers to grow faster, better, and healthier plants. Certified and listed under OMRI®, Beyond Peat™ Professional Organics soil mixes are formulated with all-natural, premium, organic ingredients that are locally sourced, sustainable, environmentally focused, and supported by our exclusive Bio-Fiber™ Technology.

## BIO-FIBER™ TECHNOLOGY

Absorbing up to 7x its own weight in water and producing up to 25% more air space than traditional peat moss, this soil has longer and stronger fibers that optimize root development and provide improved moisture retention to protect against over- and under-watering. With naturally occurring, beneficial bacteria and fungi for increased organics performance, Bio-Fiber<sup>™</sup> Technology helps create a true "living soil" that produces impressive results.

# SUSTAINABLE AND ENVIRONMENTALLY FOCUSED

Beyond Peat<sup>™</sup> Professional Organics soil mixes feature sustainable ingredients and are **100% peat-free**, locally sourced, and environmentally friendly—helping reduce carbon emissions and the footprint caused by mining of other natural resources. Positively impacting wetlands and bogs around the world, Beyond Peat<sup>™</sup> Professional Organics soil mixes are an upgrade that's better for everyone—and everything.

## Major University Study of the Physical Properties of Various Materials

	Total Porosity(1)	Container Capacity(2)	Air Space(3)	Bulk Density(4)	рН	EC	% Moisture(5)
	% Volume	% Volume	% Volume	G/CC			
Bio-Fiber	80.5	66.2	25.2	0.22	8.1	1.27	52
Peat Moss	86.8	67.9	19	0.10	4.3	0.06	42
*USCC-STA-Compost	77.4	55.3	22.1	0.45	6.8	0.46	44
33% Each Component							
Bio-Fiber, Compost, Pine Bark	75.5	63.4	18.1	0.28	6.4	0.63	48.2
Peat Moss, Compost, Pine Bark	83	67	15.9	0.27	5.1	0.42	54.9

<sup>\*</sup>U.S. Compost Council, STA Certified

#### **Definitions of Key Physical Properties:**

- (1) Total Porosity refers to the fraction of the total soil volume that is taken up by the pore space (Nimmo, 2004). Mainly, pore spaces facilitate the availability and movement of air or water within the soil environment. Total Porosity + Percent Solids = 100%
- (2) Container Capacity sometimes referred to as water-holding capacity or water retention ability, denotes the maximum amount of water that can be held by a plant's grow medium within a container before gravity forces the water to flow out of the container's drainage holes.
- (3) Air Space provides room for the soil to hold water and dissolved nutrients needed by the plant. The air also provides oxygen, which is needed by the roots of all plants and most (but not all!) microorganisms that live in the soil. Total Porosity = Container Capacity + Air Space.
- (4) Bulk Density is defined as the dry weight of soil per unit volume of soil. Bulk density considers both the solids and the pore space; whereas, particle density considers only the mineral solids. The mass is determined after drying to constant weight at 105 degrees C and volume is that of the sample in the cylinder and expressed in grams/cubic centimeter.
- (5) Moisture Content is an indicator of the amount of water present in soil. Moisture content is the ratio of the mass of water in a sample to the mass of solids in the sample, expressed as a percentage. This is calculated by: (Wet weight-dry weight)/ Wet weight x 100. This is the common forms for most data. It denotes how much of a particular sample is comprised of water.



"Bio-Fiber as an ideal candidate for Soil Mixes as a substitute for Peat Moss; Bio-Fiber had physical properties similar to Peat Moss in aeration and water holding and better in EC and air space."

Major Agricultural University



# **Microbial Population in Bio-Fiber**

Assay Name	Result	Desired Level	Pro Commentary		
Active Fungi	7.16 pg/g	>3.00 pg/g	Within Normal Levels		
Total Fungi	528.73 pg/g	>300.00 pg/g	Good Fungi Biomass and Diversity		
Active Bacteria	241.37 pg/g	>3.00 pg/g	Within Normal Levels		
Total Bacteria	3927 pg/g	>300.00 pg/g	Good Bacterial Biomass and Activity		

#### Information pertaining to E.coli, Salmonella and Heavy Metals:

Bio-Fiber is listed by OMRI and CDFA and is therefore available to be used in Certified Organic Farming. To meet the strict application requirements, laboratory testing was submitted to show the presence of E.coli, Salmonella and the 9 Heavy Metals. Bio-Fiber is within the standards and thus eligible for Organic listings.

OMRI Listing IAS-2921 as a Crop Fertilizer and Soil Amendment

CDFA Certificate of Registration 596465

For Municipal Projects requiring a MSDS certificate, available upon request







"Bio-Fiber has a nice bacteria population and a reasonable amount of <u>fungi</u>, this active biological component will compliment other inputs used as substrates in premium soil blends."

Sanctioned Biological Lab



# Report from Pat2H Horticultural Research Services following the statistical program of Gylling's Agricultural Research Manager Standards.

#### **Excerpts from the Executive Summary**

- \*A comparison of Bio-Fiber vs. Peat Moss in a soil mix showed a favorable increase in the level of nutrients in the Bio-Fiber soil.
- \*In nearly all cases all plant species tested (5) had a favorable response to Bio-Fiber. Plant leaves had a good green color and overall qualitative response through the 15-week trial.
- \*Of the 5 species in the trial, Bio-Fiber had a growth size enhancement ranging from 18-86%.
- \*There was a noticeable impact of enhanced rate of P2O5 and K2O as well as micronutrients in the Bio-Fiber.
- \*With 40% moisture being the minimum acceptable standard, Bio-Fiber when blended with other standard feedstocks (Bark, Compost) well exceeded the 40%.
- \*Air space standard is 7-12% established by the Mulch and Soil Council in a soil blend, each blend with Bio-Fiber improved the air space at least 10% and was a higher percentage in direct comparison to Sphagnum Peat Moss.
- \*In using Bio-Fiber in the soil mix, the total porosity in all trials are within the acceptable standard.



"The Bio-Fiber when blended with either compost or bark makes a very nice homogeneous blend for spreading. The compost and wood particles evenly disperse through the Bio-Fiber as blended." Professional Grower



### Chemical Analysis of Bio-Fiber Blend vs. Sphagnum Blend Pre-Test & NO FERTILIZER SUPPLEMENTS

Macro Nutrients	BF:APB (ppm)	SPM:APB (ppm)	Normal (ppm)
Nitrate (NO3-N)	38.90	2.10	40-200
Ammonium (NH4-N)	0.33	0.14	0-30
Phosphorus (P)	18.37	3.90	5-30
Potassium (K)	92.15	14.66	40-200
Calcium (Ca)	32.87	5.69	40-200
Magnesium (Mg)	12.86	0.86	28-80
Micro-Nutrients			
Iron (Fe)	3.66	2.74	0.30-3.00
Manganese (Mn)	0.17	0.04	0.10-3.00
Boron (B)	0.23	0.10	0.05-0.50
Copper (Cu)	0.06	0.00	0.01-0.30
Zinc (Zn)	0.10	0.03	0.10-0.30
Molybdenum (Mo)	0.00	0.00	0.01-0.10
Other Nutrients			
Chloride (Ci)	21.06	2.41	28-53
Sulfate (SO4)	3.74	3.41	25-125
Sodium (Na)	20.44	2.42	<50.0
Aluminum (AI)	7.41	6.01	<5.0
Silicon (Si)	8.04	6.38	25-100
рН	6.69	4.40	
Soluble Salts (mmho/cm)	0.31	0.10	





The entire 44-page report which includes substantial data is available upon request



#### **Bio-Fiber Scorecard:**

- ✓ Physical Properties
- ✓ Nutrient Analysis
- ✓ Microbial Population
- ✓ Grow Trials



# **POSITIONING**

### BEYOND PEAT® IS THE FUTURE OF SOIL MIXES

Absorbing up to seven times its own weight in water and exceeding traditional peat moss efficacy, Beyond Peat helps gardeners grow faster, better, and healthier plants. A pathogen-free, organic soil amendment that delivers the water retention performance you demand.

Listed organic under OMRI, Beyond Peat is extracted from agricultural residuals, treated through natural processes, and features **Bio-Fiber™ Technology**. This new technology offers increased air space for root development and superior moisture retention. With naturally Bio-Charged beneficial bacteria and fungi for improved organic performance, it does everything natural peat moss does but without any of the drawbacks.

Depleting the resources of natural sphagnum bogs is a thing of the past. And unlike other solutions, Beyond Peat is **100% sustainable**, locally sourced, and environmentally friendly—an upgrade that's better for everyone (and everything).

IT'S TIME TO GROW BEYOND, IT'S TIME FOR BEYOND PEAT.



## **LONGER, STONGER FIBERS**

25% more air space for superior root development and nutrient uptake

## MOISTURE RETENTION

Maximum moisture retention holds 7x its weight in water to protect against over and under watering

# BALANCED PH

Naturally balanced, neutral pH

# LOCALLY SOURCED & 100% RENEWABLE

Environmentally friendly without depleting natural resources













# Formulated for all indoor & outdoor container gardening

- ENHANCED NUTRITIONAL BENEFIT
   Contains Bio-Charged Organic Fertilizer
   for up to 3 month feeding
- BETTER MOISTURE CONTROL
   Holds 7X its weight in water to protect
   against over and underwatering
- MORE AIR SPACE
   25% more air space than peat moss for superior root development and nutrient uptake
- 100% SUSTAINABLE
   Locally sourced, environmentally friendly without depleting natural resources









# Formulated for all in-ground vegetable & flower gardening

- ENHANCED NUTRITIONAL BENEFIT
   Contains Bio-Charged Organic Fertilizer
   for up to 3 month feeding
- BETTER MOISTURE CONTROL
   Holds 7X its weight in water to protect
   against over and underwatering
- MORE AIR SPACE
   25% more air space than peat moss for superior root development and nutrient uptake
- 100% SUSTAINABLE
   Locally sourced, environmentally friendly without depleting natural resources









# BEYONDPeat Raised Bed Mix

# Formulated for raised beds and container gardening

- **ENHANCED NUTRITIONAL BENEFIT** Contains Bio-Charged Organic Fertilizer for up to 3 month feeding
- **BETTER MOISTURE CONTROL** Holds **7X** its weight in water to protect against over and underwatering
- MORE AIR SPACE 25% more air space than peat moss for superior root development and nutrient uptake
- **100% SUSTAINABLE** Locally sourced, environmentally friendly without depleting natural resources







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The latest tools and homeimprovement products to help you tackle your to-do list BY SAL VAGLICA

1. Neat and easy garage storage Ryobi Link Modular Storage System

More versatile and even simpler to install than pegboard, this wall-storage system starts with 33-inchlong polymer rails that screw into studs. The rails hold any of 15 different organizers and support 75 pounds per linear foot. \$30 for two rails, accessories from \$9 to \$65 each; ryobitools.com

#### 2. DIY-friendly bath-fan upgrade

WhisperFit DC Fan This yent fan's hinged support bracket slips easily into the ceiling. then expands to full size. Set the speed to 50 or 80 cubic feet per minute (cfm) for a powder room, 110 cfm for a full bath: all three settings are ultraquiet. From \$217; fitdcfan

3. Washable matte wall color Behr Ultra Scuff Defense Interior Extra **Durable Flat Paint** Most velvety matte paints don't hold up well to being cleaned,

but this affordable formula has the scuff and scrub resistance of a gloss, so you can apply it in high-traffic areas like hallways. \$38 per gallon; behr .com

#### 4. Makeover for garage doors GarageSkins

Upgrade the look and performance of steel garage doors with these wood-veneerand-foam-core panels, held in place with rare-earth magnets. A door-spring adjustment may be required; the skins add up to 60 pounds to a two-car garage door. From \$749; garageskins.com



With antimicrobial ingredients that protect against mold and mildew, this flat paint is suitable for use in bathrooms, too.







TOM SILVA General Contractor "Using the cutoff

wheels on rotary tools is a handy way to trim bolts in hardto-reach areas where reciprocating saw blades won't fit."





A carbon-fiber shaft and lithium-ion battery keep this tool's weight down to iust 121/2 pounds.



TOH PRO TIP



**JENN NAWADA** Landscape Contractor

"For new garden beds, I like to incorporate a 1-to-1 blend of compost with topsoil, adjusting it to suit the plant's pH preference."

WORKSHOP

#### 5. Higher speeds, longer run times

#### Dremel 8260 Cordless **Brushless Smart Rotary Tool**

This rotary tool delivers 20 percent faster cutting speeds than its cordless predecessor-up to 30,000 rpm-and its 12-volt battery lasts twice as long. The secret? A brushless motor that efficiently manages the extra power, \$169; homedepot.com

#### 6. Compact washer DeWalt 2100 MAX psi Electric Jobsite

Pressure Washer This 24-pound, 2,100-psi sprayer is designed so all its parts fit neatly on a rolling 23-inch frame. The cord wraps underneath, the hose nestles under the top handle, and the wand and spray tips pack away inside. Its wheels and telescoping handle make it as easy to move around as a



carry-on. Uses only 1.2 gallons of water per minute. \$249; homedepot.com

#### 7. Frustrationfree trimming

#### POWER+ Powerload String Trimmer with Line IQ

This string trimmer's 56-volt battery has the power to whack wide swaths of grass down to size, and the ability to sense and automatically feed out more line when needed: no more bumping the head on the ground. \$330; egopowerplus.com

#### 8. Save time while adding molding

Trim Buddy When installing door and window trim, this little tool punches above its weight. Use it to set 1/4-inch reveals, strike scribe lines, and mark 45° miters. \$20;

#### thetrimbuddy.com 9. Eco-friendly soil builders

#### BeyondPeat

Most peat moss used in the United States is dug out of Canadian bogs, a mining process that destroys wetlands known for capturing tons of carbon. Here's a better alternative: peat-free soil mixes made of Bio-Fiber, a product extracted from dried dairy-cow manure. Mixed with organic fertilizer and compost, it holds up to seven times its weight in water and provides up to 25 percent more air space for roots than natural peat. From \$4 percubic foot: beyondpeat.com

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and spray tips pack away inside. Its wheels and telescoping handle make it as easy to move around as a

# **TOH PRO TIP**



**JENN NAWADA** *Landscape Contractor* 

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# **9.** Eco-friendly soil builders

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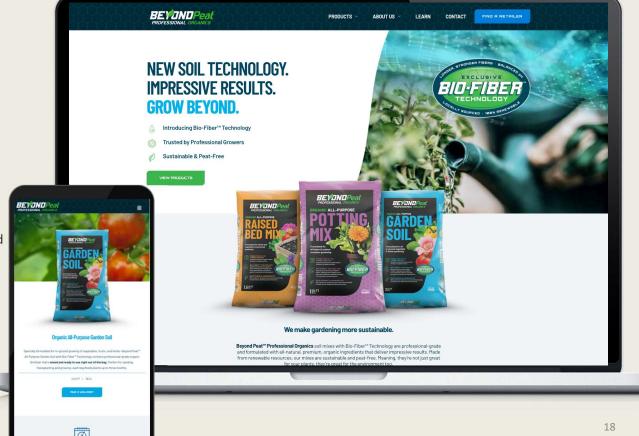


BEYONDPEAT: SHAWNA CORONADO

## The website intros Bio-Fiber<sup>™</sup> technology

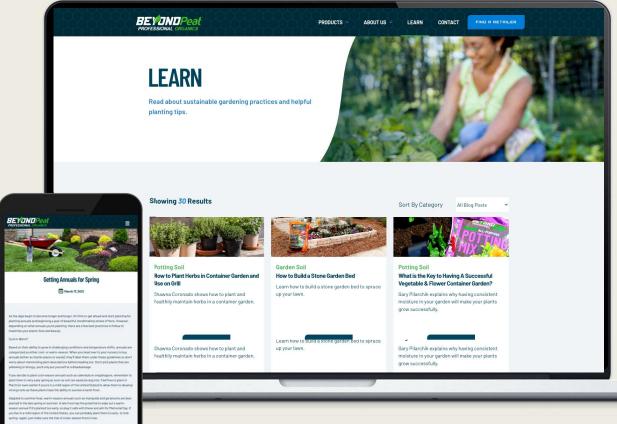
The website provides consumers information about why Beyond Peat soils are the premium choice, explains the Bio-Fiber Technology, and directs users to their nearest retailer to purchase

- Retail store locator
- Responsive design makes
   <u>beyondpeat.com</u> mobile friendly,
   for improved user experience
   across platforms putting the brand
   where our target demographic is



# Blog content provides thought leadership

- To keep the content relevant, we publish topical content based on a content calendar
- Our key influencers provide content, to further build visibility and engagement



# Social media built affinity.

Our acquisition campaigns have helped build the social community, and a website referral program

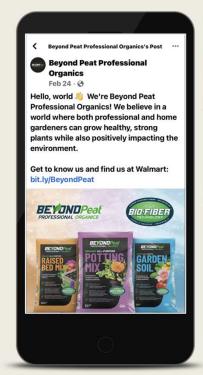


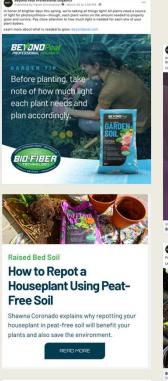
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# Social content and digital ads drive engagement.

The overall content strategy is focused on brand affinity, product awareness and specific applications—garden, potted plants and raised beds

Creative content is a mix of product imagery and graphics, as well as humanizing the brand with photography, blog content and videography





⟨ □ Beyond Peat Profes...



Influencers provide credibility.

Our PR focus is to work with garden influencers on social, video, and blog content. Shawna Coronado developed a video series in 2022.

Rachel Quenzer from Sugar Maple

Farmhouse documented her growing successes on her blog



We also created a digital media kit to send to media members for story collateral, and key editorial placements are underway







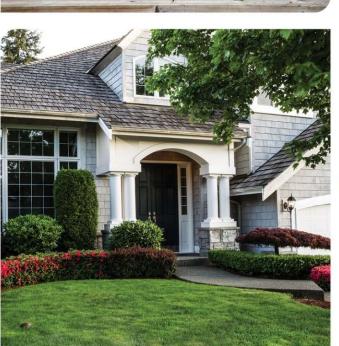
# Public relations gets the word out.

#### 2023 Placements included:

- Garden Gate: Their January/February issue featured Beyond Peat as a product spotlight in their "Garden Essentials" section. (250K subscribers)
- Acreage Life Magazine: Running a spotlight on Beyond Peat in March 2022 issue
- This Old House: Beyond Peat will be featured in the June, 2022 issue, with a monthly reach of 6M subscribers













# **BEYUNDPeat**

PROFESSIONAL ORGANICS



