



Tumblebug Mushroom Farms

Grow Your Farm,
Your Way.



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Welcome to a New Kind of Farming

At Tumblebug, we believe farming should feel hopeful again. That's why we are sharing our ready-to-grow Mushroom Farm Systems based on our successful Blenheim Estate based mushroom farm - designed for farmers and landowners who are ready to diversify and thrive.

Our mission? To make it easy, sustainable, and profitable for you to grow gourmet mushrooms — turning waste streams into income streams — and farming into a year-round opportunity.

But here's the thing: this isn't a one-size-fits-all formula. The beauty of the Tumblebug Mushroom Farm model is that it flexes to fit your goals, your land, and your level of input. We're not making lofty promises — we're giving you the tools, the knowledge, and the opportunity to shape your own success. Whether you're looking for a supplementary income or a full-scale farming venture, the returns are in your hands. The more you put in, the more you stand to gain. This is about transparency, potential, and putting you in control. It's your farm, your way.



Why Invest in a Mushroom Farm?

A Market on the Rise

- The global gourmet mushroom market is thriving, with a projected Compound Annual Growth Rate (CAGR) of **9.7% through 2030**.
- Mushrooms like **King Oyster** and **Lion's Mane** are in growing demand from chefs, health-conscious shoppers, and vegan consumers.
- The vegan food market is booming, with a **56% increase in vegan orders in 2024 alone**.

High Profit Potential, Low Input Costs

- King Oyster mushrooms can deliver **profit margins of 48–60%**, and Lion's Mane ranges from **44–58%**, based on your growing model.
- Thanks to the use of **organic waste substrates** and efficient container systems, setup and operational costs remain comparatively low.
- Multiple harvests per month support strong, recurring revenue opportunities.

Sustainable, Smart Farming

- Grows on coffee grounds, sawdust, and other low-cost agricultural by-products.
- Spent substrate can be recycled into compost and/or converted to biochar in Tumblebug's on farm pyrolysis unit for added value and carbon removal.
- Minimal land requirements and controlled environments make production **scalable, weatherproof, and resilient** — start small and grow at your own pace.

[!\[\]\(aa53ad6fea213b8b2226d3077e30533a_img.jpg\) The Health Benefits of Mushrooms for Immune Function and Heart Health - BBC News](#)



Profit Margins

- King Oyster: 48-60%
- Lion's Mane: 44-58%



Low Input Costs

- Minimal Energy Costs
- Uses waste as raw material, reducing spend.



Growing Market

- 56% rise in Vegan Orders (2024)
- Global gourmet mushroom market: 9.7% CAGR

Get Growing: Start with Confidence

What to expect before you begin

Before you commit, we guide you through the Discover phase of our 4-Step design approach: a structured feasibility assessment to ensure mushroom farming fits your goals, your site, and your resources.

DISCOVER: Pre-contract

- We take you through the Business Model and options for substrate sourcing, block processing, mushroom species.
- We look into your local potential market and operational model
- We use our Business Modelling Tool to create illustrations for your potential Business Plan which can be used to support financing options with lenders such as Oxbury Bank.

DELIVER

- We schedule equipment orders and delivery. Your system could be on-site in as little as 8 weeks, and your Ecobot within 12.
- You'll receive a step-by-step setup timeline and project plan with Milestones and all the support needed to get growing with confidence.

DEFINE:

- **Your Farm Model and business plan - 1-Unit or 2-Unit - add on extra Units when your business is securely established.**
- Your customer base: we support you with searching the local area for potential sales outlets - farmers' markets, pubs, restaurants, chefs.
- Your chosen mushroom types & volumes according to your market research: Tailor production to match your customer base preferences.
- Labour & operations: Decide who'll run the farm and build that into your plan.
- Your site suitability.

DEVELOP:

- Site visit & checklist: We define and agree works required for acceptance of your Units with our electricians and build team.
- Your Ready to Grow fully equipped mushroom farm units .
- Training & documentation: hands-on training and start building your custom operating procedures.



Inside the Tumblebug Mushroom System



Your farm-in-a-box: Choose from the full growing system or ready to fruit prep and grow rooms, built and equipped and ready to grow. With scale up additional units available as your business becomes established.

Mush Room 1 – Fruiting only - A Unit designed with its own Tumblebug Online Control System for regulating humidity, CO2 and temperature. Specifically designed for receiving weekly palletized deliveries of Ready to Fruit blocks from our partners at Merit Mushrooms. Includes 12 x 5 shelf fruiting bays which will enable you to grow a selection of mushroom varieties which fruit well under the same conditions - including Lions Mane, Blue, Summer, Black Pearl, Golden, Nameko, Shiitake.

Mush Room 2 – A Unit equipped for substrate mixing, sterilisation and inoculation with incubation space for 6 x 5 shelf inoculation bays. The Tumblebug Control system provides the flexibility to use this as a second fruiting room for alternative varieties which require different conditions such as Maitake (Hen of the Woods). The multi functional Ecobot doubles up for post harvest treatment of the used blocks ready for pyrolysis or composting - presenting further revenue generating opportunities and completing the circular regenerative value chain.

All backed by full installation, servicing, systems documentation, mycology advice and block and spawn supply from our partners at preferential rates.



Business Models that Fit your Goals

Sell Direct or Wholesale: It's Your Business

Whether you're supplying local chefs, selling at farmers' markets, creating dried mushroom products, or selling grow kits from your farm shop (We supply kit design, content and costings produced with your company branding) mushrooms offer flexible and scalable income streams. Our system supports both B2B and B2C models, so you can tailor your farm to match your goals.

Your Farm, Your Way.

B2B Models	B2C Models
Supply high-end restaurants, pubs/gastro pubs, hotels, and farm shops with fresh gourmet mushrooms.	Sell directly at farmer's markets or through subscription boxes
Build long-term supply relationships and sell at wholesale rates.	Create your own branded grow kits — perfect for home cooks, schools, or gift shops or as take-aways from farm visits.
Identify food manufacturers who use gourmet mushrooms in sauces, foods and plant based alternatives.	Explore value-added products like dried mushrooms or powders.



Your Farm, Your Way.

The Tumblebug Process: Step-by-Step Guide to Your Mushroom Farm. We invite you for an initial one-day visit to our farm to experience the process, get to grips with what is involved and carry out an initial feasibility assessment discussion.

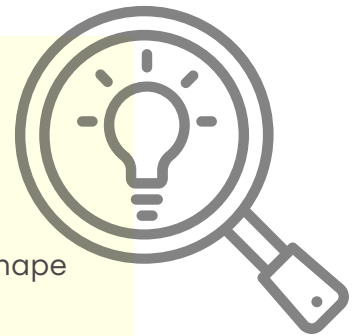
We make it simple to start smart. Here's how we guide you every step of the way — from idea to harvest — in four simple stages:

Discover

What's available and what's possible?

Start by exploring the key ingredients and permissions that shape your setup:

- **Find your substrate mix:** Identify local sources for spent coffee grounds, sawdust and other substrates. These are the backbone of your growing medium — and a major sustainability win or opt for Ready to Fruit blocks or a combination.
- **Check permissions:** Register with your Local Environmental Health Department to identify planning requirements, and schedule your inspection.
- **Assess your context:** Every site is different. Tumblebug will help you explore how our model can work for your location and check that it meets the initial site pre-requisites.



Define

Who are you growing for?

It's time to shape your vision into a business:

- **Understand your market:** Will you sell fresh or dried mushrooms, or both? Will you sell to restaurants, farm shops, or at farmer's markets?
- **Choose your mushrooms:** The species you grow will depend on what your market wants and how regularly they'll order.
- **Labour and logistics:** Will you run the farm yourself or hire someone? Factor this into your operating model.
- **Build your OPEX model and business plan:** We support you with assets to engage with customers and assess your market.
- **Confirm your site location:** Will it be public facing? Are you going to host visits?

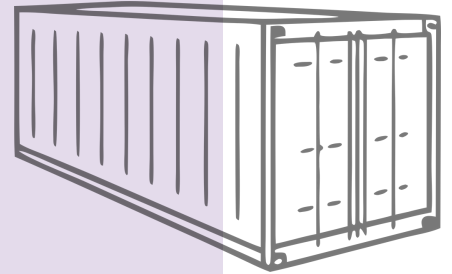
Your Farm, Your Way.

Develop

Get ready to grow.

This is where your plan becomes real:

- **Site Visit :** We confirm your location and guide you on what site prep is needed pre-delivery (Flat ground, access to water, single-phase or 3-phase electricity).
- **Finalise your business model:** WE commence the build while you commence your training and Operational Plan building - milestones and project planning is shared.
- **Prepare your site:** You'll level the ground, prepare utilities, and make any adjustments needed to receive your Mushroom Farm.



Bringing your farm to life.

Now it's action time!

Deliver

- **We build and coordinate delivery:** Containers (~8 weeks), Ecobot (~12 weeks), plus all other components including our bespoke AC / Humidification and CO2 control system.
- **Installation & equipment:** Everything from HEPA filters and stainless-steel workstations to the racking and trolleys gets installed.
- **Second fix & system setup:** Electricals, plumbing, carpentry, AC — all completed and checked.
- **Sign off & spawn:** We test the systems, help you sign your spawn supply contract, and you're ready to grow.



Estimated Timeline from Discovery to Delivery phase:

8 - 16 Weeks

RRP Prices & Ave. Yields

We recommend starting with mushroom varieties that thrive under similar conditions and are quite easy to grow - varieties which grow well in pasteurised coffee grounds such as Blue Grey Oyster, Black Pearl, Golden and Summer as well as Lion's Mane. If buying-in Ready to Fruit blocks choose varieties which will fruit well together, require the same temperature, levels of CO₂ and humidity.

Recommended Retail Price (Fresh - high quality Farm to Fork local supply) based on market assessment and Tumblebug business model	Suggested price/ kg (1kg - 3kg) sold at Farmer's Markets and to Pubs/restaurants	Suggested price per kg to trade for regular orders of >5kg /week
Blue Grey Oyster	£14.00	£13.00
King Oyster	£17.00	£14.00
White Elm	£14.00	£13.00
Golden Oyster	£17.00	£14.00
Black Pearl Oyster	£17.00	£14.00
Lions Mane	£22.00	£20.00
Summer Oyster	£14.00	£13.00
Enoki	£17.00	£14.00
Shiitake	£17.00	£14.00
Maitake	£28.00	£25.00
Nameko	£22.00	£20.00
Shimeji	£24.00	£22.00

Considerations:

- Our example here is just one possible operating model. The combination of varieties and suggested prices are flexible and will vary according to location and many other factors.
- Mushrooms can be dried to provide high value product with longer lasting shelf life
- The return you achieve will be dependent upon how much you put into the business and how you operate and utilise your space.
- The space can be used to accommodate ~600 fruiting blocks in Unit1 and ~300 further fruiting blocks or incubation blocks in Unit 2.
- One 5l spawn block will create 10 x 3.3kg substrate blocks to yield on average 1kg of mushrooms (dependent on species)
- Each 3.3kg block will deliver on average 1.1kg of mushrooms across 3 flushes for most species.

Process Flow Examples

Understand the numbers. Unlock the potential.

From substrate prep to spawn inoculation, incubation to harvest — gourmet mushroom farming can be incredibly rewarding but like any business, your returns will depend on how you run your operation. We've included example financials here to guide your thinking. You won't be doing this alone: we'll work with you to build a financial model tailored to your setup, your time, and your ambitions. Mushrooms grow in cycles we call Process Flows. Here is one example of the Process Flow for the single Unit Fruiting only container. We walk you through the Process Flows for the other Units when you visit and explore the business opportunity.

Process flow example - Fruiting Room Unit 1

Week	No. Blocks added	Racks	Total Blocks in Room	Flush 1 - est. (kg)	Flush 2 - est. (kg)	Flush 3 - bottom shelf - est. (kg)	Remove blocks	Remove Blocks
1	100	1 2	100					
2	100	3 4	200					
3	100	5 6	300	75				
4	100	7 8	400	75				
5	100	9 10	500	75	25			
6	100	11 12	600	75	25	5		
7	100	1 2	600	75	25	5	1 2	100
8	100	3 4	600	75	25	5	3 4	100
9	100	5 6	600	75	25	5	5 6	100
10	100	7 8	600	75	25	5	7 8	100
11	100	9 10	600	75	25	5	9 10	100
12	100	11 12	600	75	25	5	11 12	100
13	100	1 2	600	75	25	5	1 2	100
14	100	3 4	600	75	25	5	3 4	100

12 racks x 5 shelves. Use top 4 shelves for Flush 1 and 2. For third flush rehydrate best blocks which look like giving third flush and use x2 bottom shelves (40 blocks from the batch). 2 bottom shelves 20 per shelf - 40 blocks retained for third flush.

The Finances

During the Discover stage we model potential options with our Business Planning Tool to create your own Business Plan.

1-Unit and 2-Unit Tumblebug Mushroom Farm Summary - Financial Overview				
	1 - Unit Farm (Fruiting Only - No ECOBOT)	2-Unit Farm bought together.	Cost of Unit 2 (If purchased separately)	
Total Price	£80,000	£145,000	£72,000	
Payment 1 - Due on signature	£40,000.00	£87,000.00	£43,200.00	
Payment 2 - Due 2 weeks prior to delivery to customer	£20,000.00	£29,000.00	£14,400.00	
Payment 3 - On completion and final hand-over	£20,000.00	£29,000.00	£14,400.00	

Sales and Cost Numbers	1-Unit Fruiting Room Only	2- Unit Fruiting Rooms x2	2-Unit Inoculation, Incubation and Fruiting Space - Block and spawn model	2-Unit Inoculation, Incubation, Fruiting Spore only - NO bought in
Estimated potential sales based on illustration	£102,960.00	£155,220.00	£112,491.60	£91,000.00
Estimated COS for blocks/ spore /bags based on the illustration given - assumption coffee or sawdust for DIY blocks	£52,806.00	£83,330.00	£41,793.96	£12,270.96
Estimated COS additional consumables (PPE/Cleaning fluids/parts) and estimated utilities	£9,867.85	£13,402.42	£13,325.46	£13,115.38
Estimated labour costs for farm operations and sales admin including local delivery 10 mile radius (NOT including marketing) based on day rate cost with pension £30k pro rata to number of days req.	£20,158.32	£26,877.76	£33,597.20	£40,316.64
Gross margin with no labour	£40,286.15	£58,487.58	£57,372.18	£65,613.66
Gross margin with labour costs (Using approx. number of days to run the farm and manage harvesting - marketing not included)	£20,127.83	£31,609.82	£23,774.98	£25,297.02
Gross Margin excluding labour	39%	38%	51%	72%
Gross Margin including £30k pro rata salary	19.50%	20.40%	21.10%	27.80%
Working capital needed for first 6 weeks until revenue generating INCLUDING labour at £30k salary pro rata	£8,418.96	£12,716.28	£9,474.30	£6,067.80
ROI (years) - not including cost of labour - allow extra 6 months to establish the business	1.99	2.48	2.53	2.21
ROI (years) - including labour	3.97	4.59	6.1	5.73

Spawn supply from Mycology Experts

We're not just selling you the hardware — we're setting you up for long-term sustainable success. That's why we've partnered with Merit Mushrooms and Urban Farm-It, two of the UK's leading mycology supply outlets.

Alongside Tumblebug, they have deep, hands-on expertise in gourmet mushroom cultivation. Their teams support commercial growers across the UK with:

- **Premium mushroom spawn:** reliably high-yielding, rigorously tested.
- **Ready to Fruit Blocks:** ideal if you begin with our Fruiting Room only option
- **Recommended pricing guidance:** all RRP estimates in this brochure are representative of market research and our combined experience.

Why Now?

The demand for **plant-based, nutrient-dense foods** is growing fast — and mushrooms are leading the charge. Gourmet varieties like **shiitake**, **oyster**, and **lion's mane** are favourites not only for their rich flavours but also for their health benefits and sustainable story. Not only this, unique to Tumblebug is the add-on opportunity to embed full circular carbon removal and production biochar growing medium or soil amendments from the spent substrate adding additional regenerative financial and environmental benefits to your business model.

By investing in mushroom farming now, you're tapping into a future-focused market that blends food innovation, ecological farming, and wellness culture — all in one delicious package.



Frequently Asked Questions

What's included in the system?

- All equipment from Air Control Systems, racking and cleaning equipment plus setup documentation.

How long does setup take?

- Installation within 2-3 months from contract agreement.

What mushrooms can I grow?

- Depending on the configuration of your chosen units: a range of different oyster varieties including King and Black Pearl, Lions Mane, Shiitake, Enoki, Shimeji, Nameko — robust, and highly desirable gourmet varieties.

What are the risks?

- As with any farm, contamination, crop failure, and market access are considerations. We'll help you mitigate them.

How profitable is it?

- Depending on scale and model, farmers can achieve healthy 38-72% margins and approx. 2.3 year ROI

What are future opportunities?

- Drying mushrooms, selling grow kits, creating biochar composts and fertilisers with Tumblebug pyrolysis systems and Aerated Static Pile compost systems— and more.
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Future-Proof Your Farm

Diversify Your Revenue

Expand your income through grow kits, dried mushrooms, and regenerative farming— all rooted in circular thinking.

Farm Smarter, Sustainably

Do more with less. Feed your local community, regenerate your soil, and shrink your carbon footprint — all from a compact, climate-resilient system.

Join the Next Agricultural Revolution

This isn't a trend — it's a transformation. Gourmet mushrooms are leading the charge in plant-based innovation. Position yourself at the heart of what's next.





Ready to Grow? Let's Talk

Your next steps:

- Book a free consultation.
- Start your feasibility assessment.
- Review investment options and create your own financial model to estimate revenue potential.

Contact Tumblebug today to start your journey into sustainable and profitable mushroom farming.

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