

5 IMPORTANT STEPS TO TAKE WHEN STARTING AN INSECT FARM



1. KNOW YOUR INSECT



MANNA
INSECT

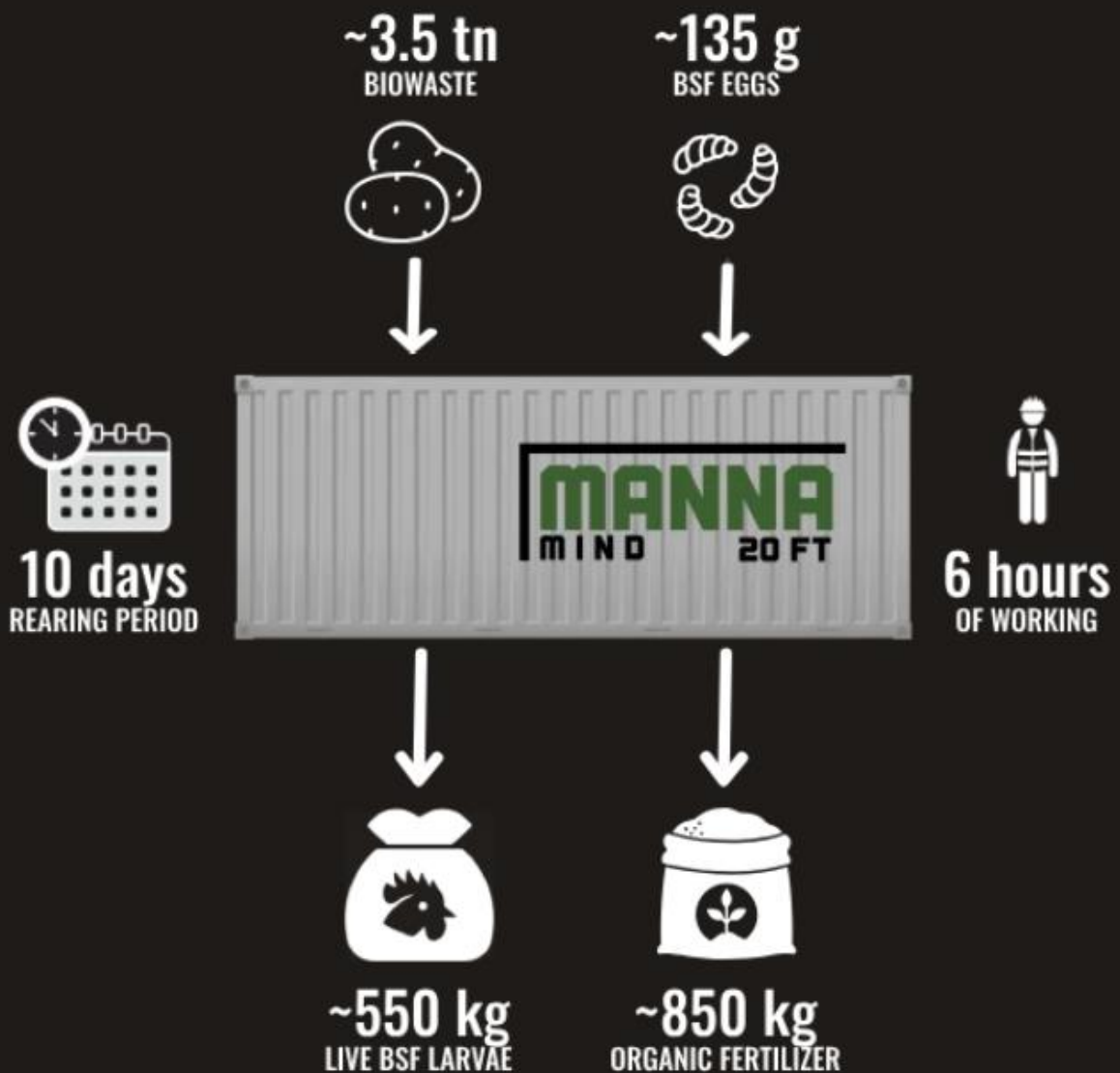
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What are the potential use cases, business cases and the market for your chosen end products? What is the insect best at? Do you need to learn biology or is it enough to understand the production and business side of things?



2. CAREFULLY CALCULATE AND INVESTIGATE THE BUSINESS OPPORTUNITY

ONE REARING CYCLE 10 - 14 DAYS



Output ratio is highly dependent on the quality of the biowaste

Organic waste: estimated capacity 9 tn / month / Manna 20ft BSF farming module

Labor: loading and unloading is average of 2-3 labor hours / ton in Manna process with professional equipment

Power consumption: average power consumption is 800W/h in warm climates

Amount of BSF eggs: roughly 30-50g/tn.
Standard: 45g/tn

Price of eggs is calculated based on Manna breeding container.
Standard: 0.50 \$/g

Dried larvae is normally 1/3 of it's original weight

INPUTS

Amount of biowaste tn/month

Biowaste price for you \$/tn

Labor cost \$/h

Electricity cost \$/kWh

BSF egg price \$/g

ESTIMATED SALES PRICES

Live larvae price \$/tn

Dried larvae price \$/tn

Organic fertilizer price \$/tn

OUTPUTS

MONETARY VALUES

COSTS

INITIAL INVESTMENT

The level of investment is contingent upon factors such as the quantity of Manna MIND units, the size and material of the module frame and insulation, the processing equipment, and the specific requirements.

For a comprehensive package including one Manna 20ft BSF farming module, along with professional processing equipment and training, the estimated price falls within the range of 12,000 to 18,000 USD.

Estimate the inputs, outputs, different business cases and investment needs before committing to any farming setup just yet. Do you know the OPEX and CAPEX of different setups?

Producers, Food Brands & Retail Service

Animal Health, Feed & Nutrition

zoetis **MERCK** Animal Health

Elanco **Boehringer Ingelheim** **CH4 GLOBAL** **DSM** **Aliflex**

Green Plains **Alltech** **MAZEN** **syngenta**

CHR HANSEN **trouw nutrition** **ARMENTA** **baichem**

ourofino **Medgene** **UNITED ANIMAL HEALTH** **Protein Pharmaceuticals** **CHS**

entosystem **Farm Health Guardian** **boveta** **TURBOCV** **COVENANT ANIMAL HEALTH PARTNERS** **Beta Hatch**

RESILIENT BIOTICS **NOVUS** **mSP[RS]** **Y-TEX**

Technology Providers

Breedr **AgriWebb** **vas**

IYOTAH **HEADSTORM**

PRECISION LIVESTOCK TECHNOLOGIES **FarmTrace**

VENCE **Vytelle** **eagle genomics**

e CATTLE EYE **Connecterra**

SWARM ENGINEERING **AgriGates**

Investors

s2gVentures **TEMASEK**

SANDBOX INDUSTRIES **TechAccel** **DC & C**

LEWIS & CLARK AGRIFOOD **CAVALLO VENTURES**

carrot **GENOA VENTURES** **anterra capital**

Bridgepoint **THE FIELD LAB ASIA PACIFIC** **illumina VENTURES** **Fall Line Capital**

AGAMERICA LENDING **CREDIT AGRICOLE** **GRIT ROAD PARTNERS**

FONDO DE FONDOS **EDEN** **Rabobank**

CULTIVATOR **NORINCHUKIN** **FARM CREDIT**

novo holdings **tavistock INVESTMENTS P.L.C.** **William Blair**

Biotechnology

Genus **AGBIOME** **GINKGO BIOWORKS**

Phagelux **BioConnect** **Iowa**

EVAH **Cascadia Seaweed**

ANIMALAGTECH INNOVATION SUMMIT

HEALTH NUTRITION PRECISION

SAN FRANCISCO, MARCH 13, 2023

Start-Ups

BINSENTRY **Bactolife** **COWEALTHY** **Genvax Technologies**

FaunaTech **CATTLEQUANTS** **Athian** **TEN CARBON**

EMGENSIS **myaniml** **FarmSee** **folium SCIENCE** **Corbiota** **zelp**

VetNOW **miRobot** **ProAgni** **bankbarn** **BLUE OCEAN FARMS** **PrüvIT**

audioT **Labby** **ArkeaBio** **GENOTWIN** **Edacious**

DISTYNCT **FeedVax** **SomaDetect** **CLEARPATH ROBOTICS** **Cattle Care**

Consultants

CHASEMAN GLOBAL **Engormix** **COVINGTON**

ERDYN **Agilech** **PANITCH SCHWARZE**

Kincannon & Reed **McKinsey & Company** **HIGH TOUCH**

Media

The Pig Site **Agri Investor**

The Poultry Site **Successful Farming**

Bloomberg **FARM JOURNAL**

Academics, Associations, Government, R&D

PennVet **U.S. Farmers & Ranchers in ACTION** **pork** **THE FOUNDATION FOR SUSTAINABLE BEEF**

AFIA **COLORADO STATE UNIVERSITY** **CAAIN**

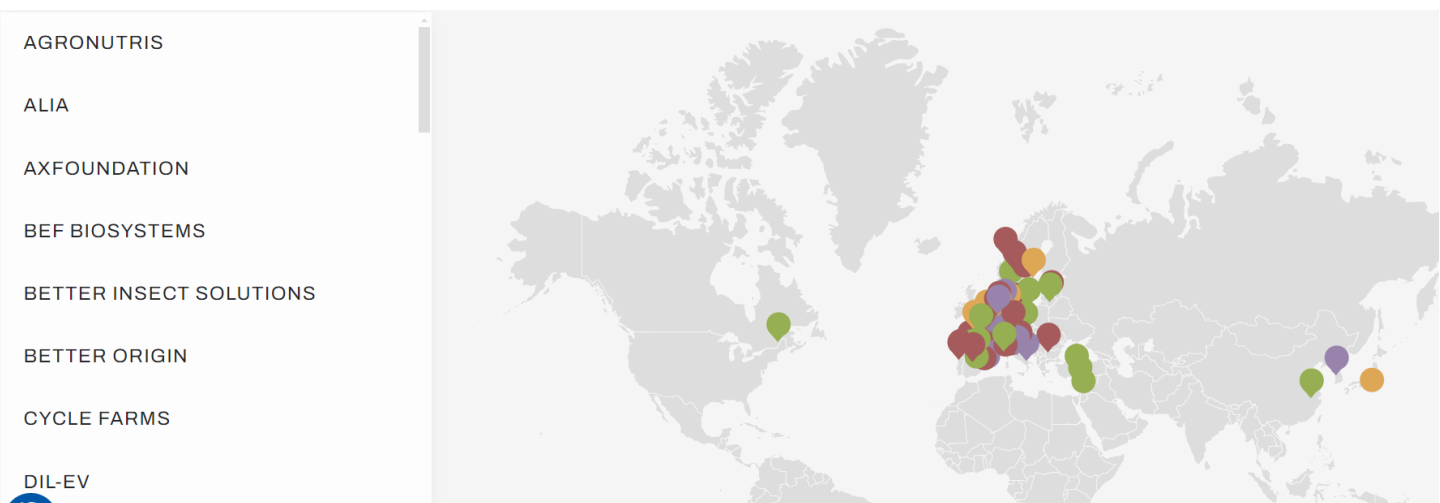
GLOBAL ROUNDTABLE FOR SUSTAINABLE BEEF **FFAR** **Government of Saskatchewan**

IOWA **MSU** **BEEF** **ALBERTA INNOVATES** **NIAA** **NATIONAL INSTITUTE FOR ANIMAL AGRICULTURE** **cdfa**

3. INVESTIGATE YOUR COMPETITION AND THE POTENTIAL SALES CHANNELS

Being the first to market or the only one doing something is an illusion.

You either just haven't researched the market deep enough yet, they might be in stealth mode, following close behind, or you're competing with solutions from another country / industry / production.



Competition is good, it verifies the market potential. Don't be afraid of it, learn from them and do things better.

4. BASED ON YOUR BEST KNOWLEDGE OR GUESS, CHOOSE YOUR BUSINESS MODEL AND SETUP, AND START DOING!



You might want to start with training or business case consulting, but it is time to take the first actual step towards producing insects.



Whatever your plans are for the future, no matter how big or small your plans may be, **start small!** It's just so much easier and cheaper to fail or fix the issues in small scale...



Once you have successfully farmed 2-3 rearing cycles with minimal setup, it's time to scale up

5. SCALE UP! ACCELERATE YOUR BUSINESS TO FULL SPEED, SLOWLY BUT SURELY.





If you started with 1 or 2 trays, scale up to 10 or 20. Measure everything!

Once you're successfully farming this set up, grow the production step by step and follow closely the bottlenecks. Fix the issues and keep scaling.

Data will guide you all the way towards your dream production size.

**READY TO START?
WE'RE HERE TO HELP.**

**MANNA INSECT – YOUR
FAST-TRACK TO PROFITABLE
INSECT FARMING!**



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