

BUG OPERATIONS

FIELD MANUAL



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EratosWorld.com

A BRIEF BACKGROUND ON ERATOS WORLD



In April of 2015, US Army Specialist Matt Tattersall and his pet fish named Willy Makelt shocked the world when they decided to jump out of an airplane and take a selfie.

After posting the photo on social media, the two unlikely heroes quickly went viral but that was only the beginning of their story.

Since then, the two have traveled all over the world in search of ways to improve our planet while also creating some of the tallest tales along the way.

The following contains some of the findings from their adventures...

PREFACE

This publication provides technical information, utilization methods, and guidance on the practice of bug operations.

The intended users include community leaders, climate controllers and futuristic farmers.

The users will find this information invaluable in their efforts towards improving our planet.

Most pictures depicted in this manual were taken and/or edited by Matthew J. Tattersall.

Terms that have joint or special definitions are identified in the text and can be found in the Glossary at EratosWorld.com.

This publication is available on EratosWorld.com. To receive publishing updates, please subscribe to our website and follow us on social media.

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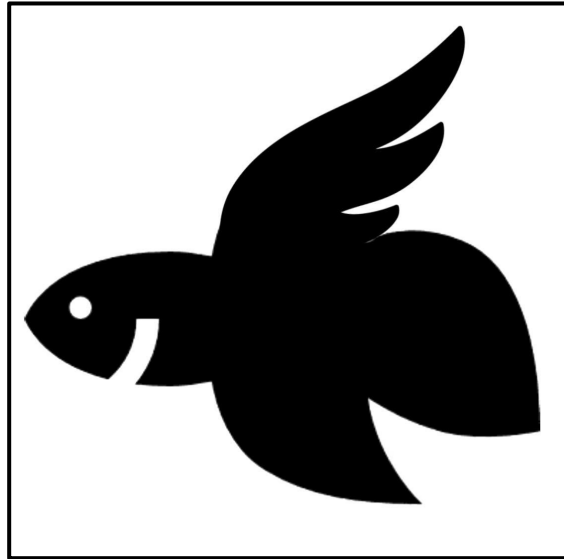
PART ONE: WILLY'S WORMS

1. INTRODUCTION
2. GENERATING REVENUE
3. RESEARCH AND DEVELOPMENT
4. ADDITIONAL NOTES

PART TWO: BEE OPERATIONS

COMING... EVENTUALLY: "No money, no honey!"

FOREWORD



This manual provides information and guidance for the conduct of dealing with a supernatural planet through various doctrines, techniques and procedures found herein. This publication should be used in conjunction with other official manuals which can be found on EratosWorld.com.

MOST IMPORTANTLY: ERATOS WORLD LLC IS NOT LIABLE FOR ANYTHING!!!

PART ONE: WILLY'S WORMS

INTRODUCTION

CONTENTS

PART ONE: WILLY'S WORMS

1. PURPOSE OF OPERATIONS
2. COLLECTING WASTE MATERIAL
3. DIET
4. LIFE CYCLES
5. MANUFACTURING PROCESS
6. KEY POINTS

PURPOSE OF OPERATIONS



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*“The prettiest landfills
in the world.”*

The purpose of this section of the field manual is to explain how mealworms and waxworms can be used for various agricultural and waste management operations.

COLLECTING WASTE MATERIAL

Waste material should be collected from the public by holding special events, campaigns, subscription services and collection points.

In exchange for their contributions, participants will receive Tater Tokens (See FM 82-9).



More on Collection Methods in FM 82-9

IT'S ALL ABOUT THE DIET

Mealworms:
Polystyrene (Styrofoam)



Waxworms:
Polyethylene (Plastic bags, bottles, etc.)



Mealworms can survive off a diet composed of Polystyrene (styrofoam) while waxworms can survive off a diet composed of Polyethylene (plastic).

This means that the decomposition process (which normally takes hundreds of years to complete) can be accomplished damn near overnight.

WHERE DOES THE WASTE GO?



*“When life hands you
garbage, grow
flowers... Haha”*

Roughly 1.25 million worms would be able to consume up to two pounds of material per day. Upon being digested, 50% of that is released in the form of CO₂ while the other 50% is considered safe to use soil for growing trees, plants or flowers (See FM 82-3 for more information).

WHAT HAPPENS TO THE WORMS?



Despite their diet, the worms remain safe to eat and since they only consume waste material when in worm phase, they can be used as livestock feed (primarily fish) or even HUMAN food upon evolving!

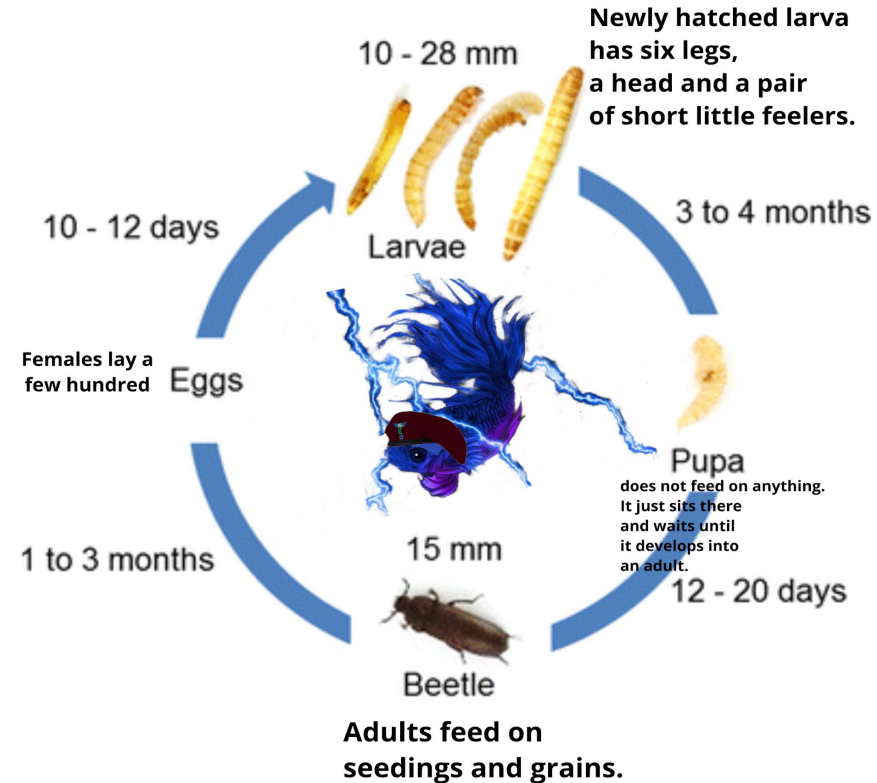
(Refer to FM 82-3 for more information)

MEALWORM LIFE CYCLE

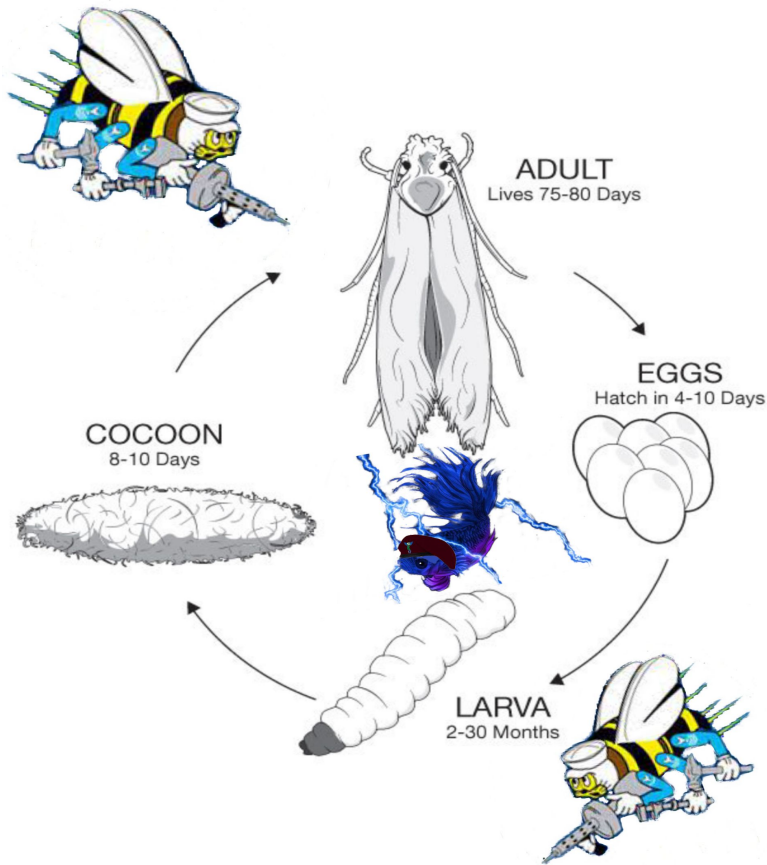
SUPER IMPORTANT NOTES:

Styrofoam can only be consumed while in larvae phase.

Stages can be prolonged by controlling the environment (see [r&d](#)).



WAX WORM LIFE CYCLE



SUPER IMPORTANT NOTES:

The worms eventually turn into moths.

They only eat plastic while in larvae stage

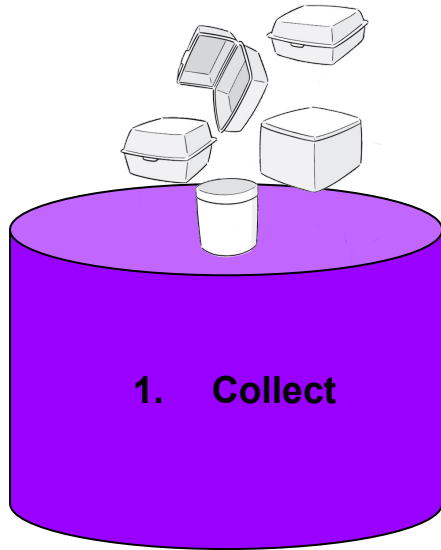
Stage lengths can be manipulated (requires further research and development)

SUPER DUPER IMPORTANT: Keep these things away from bees at all costs or else they will kill all of them and eat their honeycomb.

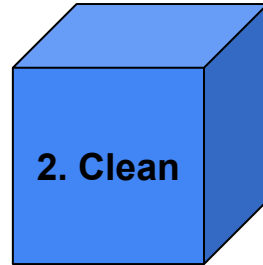
MANUFACTURING PROCESS

Material is gathered via events, campaigns, subscription services and collection points.

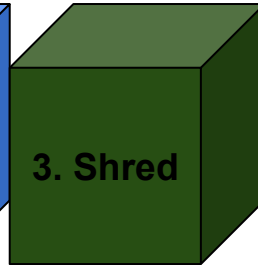
For Mealworms



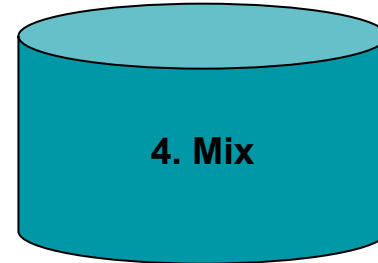
Plastic material must be washed



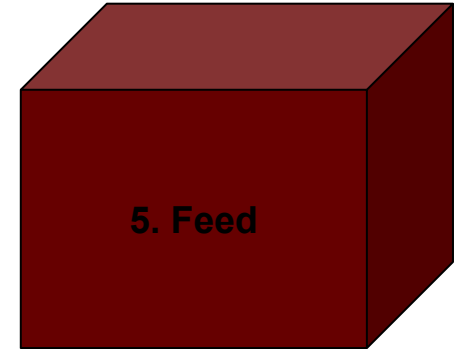
Shred / Grind material as fine as possible



Mix with food items that mealworms typically eat. (I.e - lettuce)



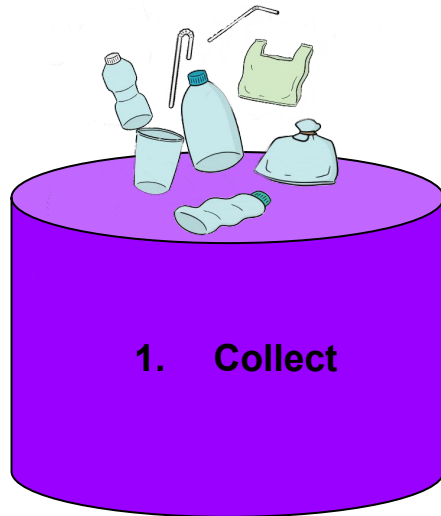
Feed the mealworms.



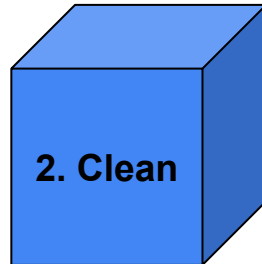
MANUFACTURING PROCESS

For Wax Worms

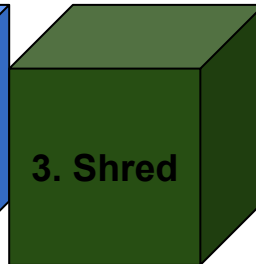
Material is gathered via events, campaigns, subscription services and collection points.



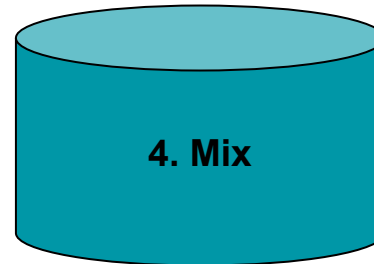
Plastic material must be washed



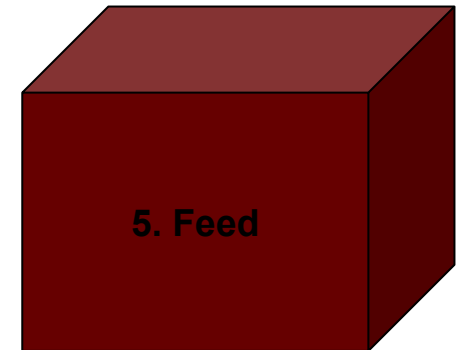
Shred / Grind material as fine as possible



Mix with food items that waxworms typically eat. (I.e - honeycomb)



Feed the waxworms.



KEY POINTS TO REMEMBER

- A. Mealworms eat styrofoam (polystyrene)
- B. Wax Worms eat plastic (polyethylene)
- C. 50% of the waste they produce is released as CO₂ while the other half becomes potable soil
- D. The two worm types can not live alongside one another or they will fight till the death so colonies must remain separate
- E. **IMPORTANT**: Waxworms love honeycomb so it is imperative to keep them away from all bee operations



**UTILIZATIONS
&
GENERATING REVENUE**

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UTILIZATIONS GENERATING REVENUE

1. UTILIZATIONS AND SOURCES OF REVENUE
2. WASTE AS WORM FEED
3. LIVESTOCK FEED
4. HUMAN CONSUMPTION
5. SOIL PRODUCTION
6. TOURISM AND COMMUNITY CENTERS
7. BACTERIAL REPLICATION AND MASS PRODUCTION

UTILIZATIONS AND SOURCES OF REVENUE

The seven possible utilizations of Willy's Worms are as followed:

1. **Waste as worm feed**
2. **Livestock feed**
3. **Human consumption**
4. **Soil**
5. **Educational content**
6. **Tourism and community centers**
7. **The Acid**



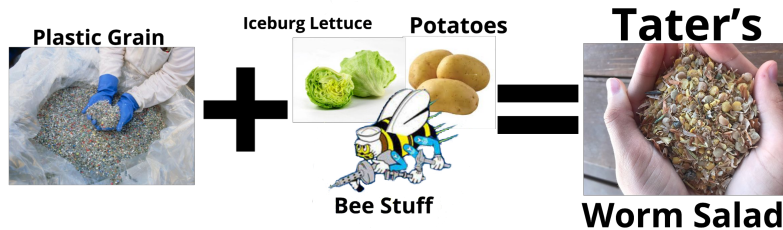
Hartford, Connecticut, USA - "The heart of America"

WASTE AS WORM FEED



Users of this manual can opt to collect waste material for manufacturing feed to be sold to other worm farmers / research organizations or “go the whole nine yards” by performing each step of the manufacturing and distribution process.

One may either feed the worms with only plastic and styrofoam or choose to create a special mix which combines the waste material along with natural diet items such as lettuce or honeycomb.



Utilizing a special mix will increase the worm's health but the drawback is that less waste would be consumed.

LIVESTOCK FEED



Utilizing Willy's Worms as livestock feed has the potential to improve sustainability because not only can they transform low-value organic wastes (i.e- fruits, vegetables, etc.) into high-quality feed but also municipal waste.

NOTE: Worms should be used as a supplement to current sources, which mostly includes fish and soybean meal.

WORMS AS HUMAN FOOD

Look, here at Eratos World, we don't condone this utilization because eating bugs of any kind is absolutely ratchet.

We've put a lot of thought into this and came to the conclusion that no human should be eating bugs over course of the future...



Chiang Mai, Thailand

WORMS AS HUMAN FOOD CONTINUED



Chiang Mai, Thailand

Now, you might be thinking:

“Hey, in places like Asia, people eat bugs all the time! In the future, it could become a norm here in America because they’re a great alternative to beef in terms of nutritious value, lowering carbon emissions and blah blah blah.”

WORMS AS HUMAN FOOD FINAL



Krabi, Thailand



River Prawn... Very good.

To which, our response is this: Stop with all that. We can produce way better food for everyone and as far as the CO2 variable goes, refer to FM 82-4... This conversation is over.

SOIL PRODUCTION

As stated previously, after digesting the styrofoam or plastic, the worm poop is considered safe to use, potable soil.

Most people would be hesitant to consume any sort of produce grown through this medium which is understandable.

The best bet would be to either grow trees, decorative plants or flowers although users of this manual could opt to sell just the soil.



Tater & Willy's Farm Factory, Eratos World

TOURISM AND COMMUNITY CENTERS

The grounds of these complexes alone will bring in crowds from all over the world. People will come to take tours, shop and view live demonstrations or participate in different activities.

Simultaneously, members of the local community will come here regularly for celebrations, leisure, networking, arts and crafts, etc.



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THE ACID



The aim here is to be able to extract, replicate and mass produce the bacteria which causes the waste material to decompose. Users of this manual would then sell or use the “acid” for further operations. See research and development section for more information...

**RESEARCH
&
DEVELOPMENT**

CONTENTS

RESEARCH AND DEVELOPMENT

1. PRIMARY ASPECTS
2. CONTROLLING PHASES
3. REPLICATION AND MASS PRODUCTION

THE TWO ASPECTS OF RESEARCH & DEVELOPMENT

- A. Controlling the length of time in which bugs are in their worm phase
- B. Enzyme and bacterial replication / mass production



The Tatt Lab - Top Secret Location

CONTROLLING CYCLE PHASES

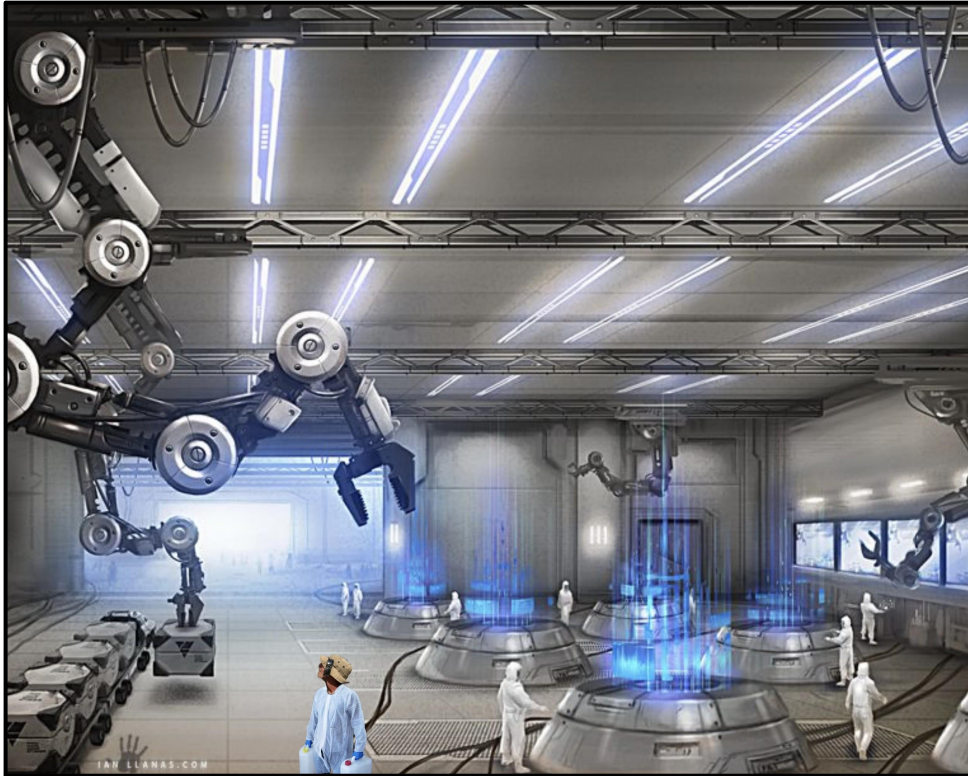
The objective here is to be able to control the amount of time in which the bugs are in their worm stage.

By manipulating the temperature of their environment and food availability, the larvae phase can either be shortened or lengthened.



The Tatt Lab - Top Secret Location

BACTERIA AND ENZYME REPLICATION



The Tatt Lab - Top Secret Location

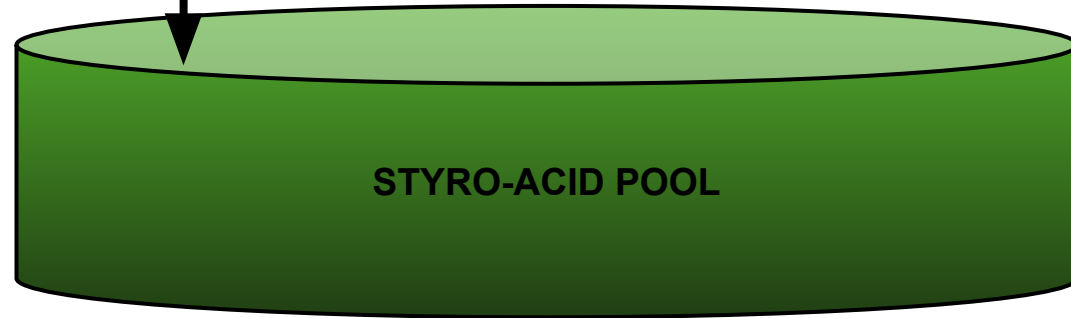
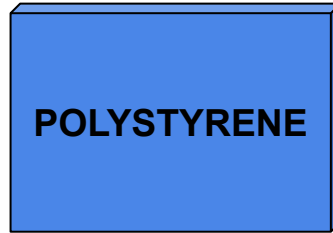
With mealworms, it is the bacteria in their stomach which breaks down the styrofoam and with waxworms, the enzymes in their saliva causes the plastic to decompose.

Through research and development, the goal is to replicate the enzymes and bacteria then sell the substance on an industrial scale and/or use it for personal operations.

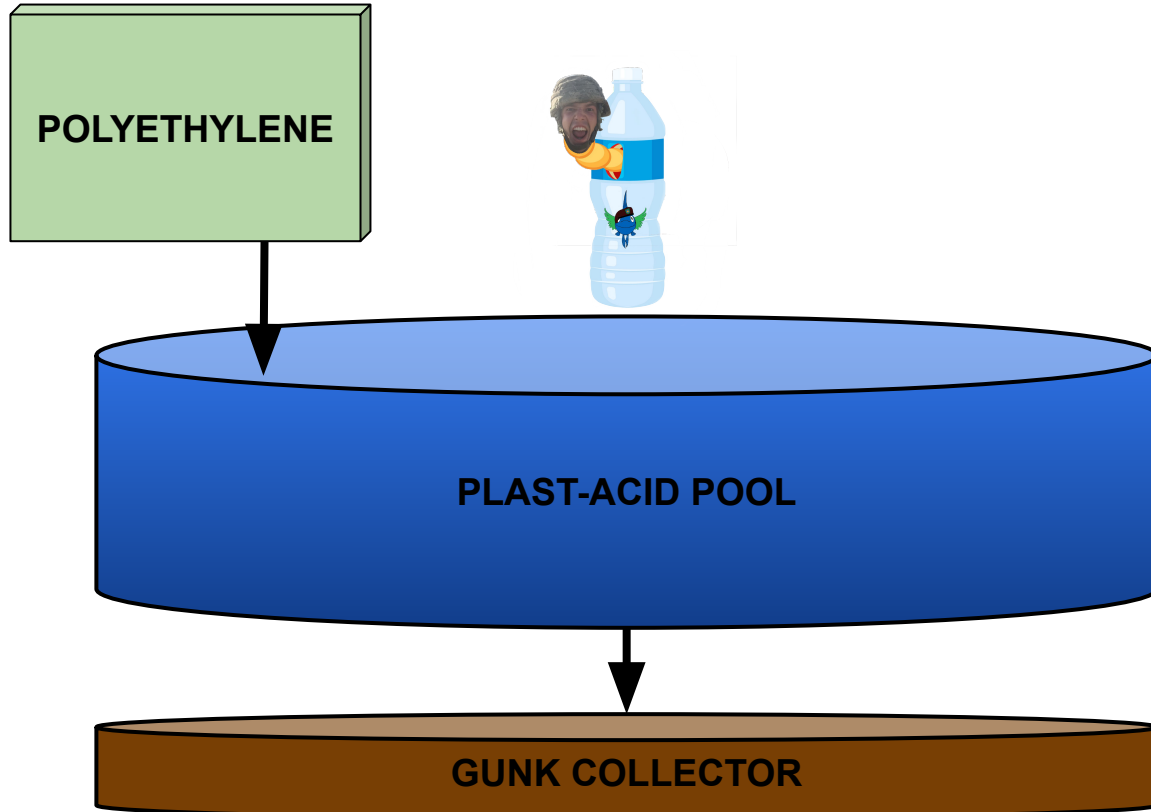
STYRO-ACID POOLS

Upon developing and mass producing the acid...

1. Styrofoam is dumped into Styro Acid pool.
2. Styro Acid pool breaks down material into gunk.
3. Gunk sinks to bottom of pool which is then used for other operations which is still to be determined.



PLAST-ACID POOLS



Upon developing and mass producing the acid...

1. Plastic is dumped into Plastacid Pool.
2. Plastacid Pool breaks down material into gunk.
3. Gunk sinks to bottom of pool where is then used for other operations which is still to be determined.

UTILIZING THE GUNK

We cannot make a determination in terms of utilizing the gunk as further research and development is still needed.

Perhaps it can be used as building material, soil, gunk balls, we will see...

First, focus needs to be placed upon replicating and mass producing the bacteria/enzymes.



Outside the Box

ADDITIONAL NOTES

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ADDITIONAL NOTES

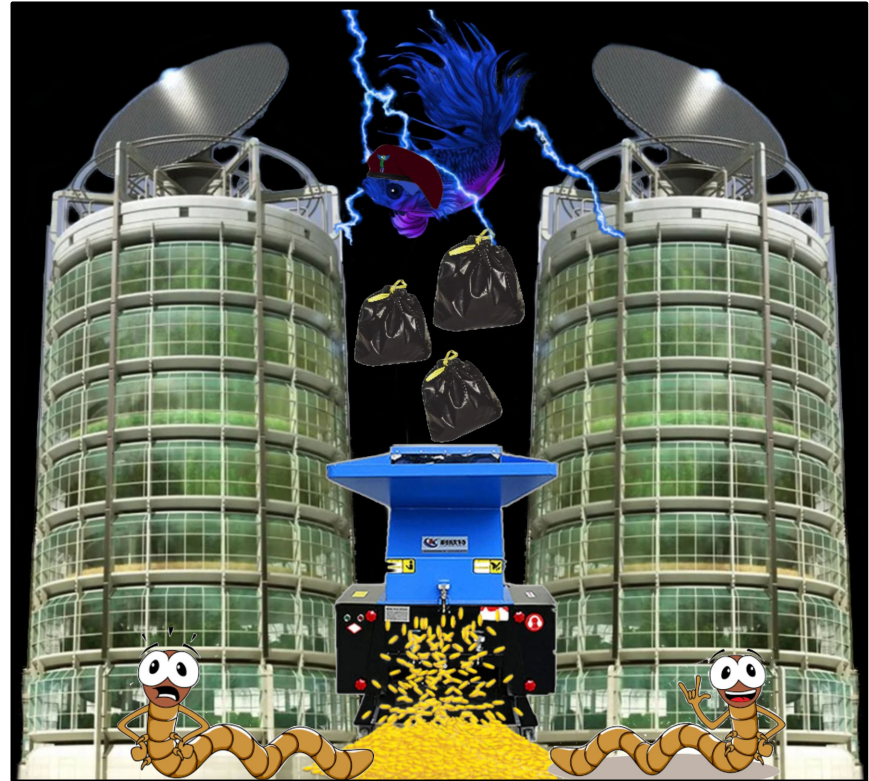
1. FINAL NOTE
2. OTHER WORKS
3. THANK YOU!

FINAL NOTE

Bug Operations are just one small piece of a much larger picture.

The overall mission is to utilize all forms of municipal waste material and in doing so, create a new currency which will enable people to earn in exchange for their contributions.

This will not be done over night of course as it is one step at a time; but, one day, we can certainly make it happen.



Tater & Willy's Farm Factory, Eratos World

OTHER WORKS:

- **FM 82-1 - CLOUD SEEDING**
- **FM 82-3 - FUTURISTIC FARMING**
- **FM 82-4 - CLIMATE CONTROL**
- **FM 82-5 - AQUA PRENEURSHIP**
- **FM 82-6 - HIGHLANDING**
- **FM 82-7 - SOCIAL JIU JITSU**
- **FM 82-8 - CRYONICS, CLONING AND GMOs**
- **FM 82-9 - A WHOLE NEW CURRENCY**

THANKS FOR READING!



Please stay in the loop for further updates by subscribing to our emailing list on EratosWorld.com

COMING EVENTUALLY

PART TWO: BEE OPS

“No money, no honey!”