Ehem… Greetings! You are our new employee, right? Well, I don’t really care, anybody can figure this stuff out, so it’s probably alright…Probably.

Anyway! Welcome to our team! Your job is to farm… species to produce energy. It is as easy as it gets: we provide you some of our better assets, food and enclosures for them. In return, you can produce energy with your specimens, or just sell them directly to us.

Do not try to do any funny stuff. As you might know, all existing livestock belongs to us, Brand New Original Occultics Initiative (later referred as B.N.O.O.I). At least for the next 26 thousand years… Well, almost 26 000 years, there is no possibility to acquire beasts without buying from us in one way or another. And I bet you don’t know what they eat. *And don’t want to hear screams preparing food, do you?*

To start your job you should first understand what you are dealing with. Those aren’t your normal cows or fish. Or whatever you used to see. So, let’s quickly run through some important things:

**Vision**

Those things are near-sighted. Very. They are unlikely to notice anything, not adjacent to them. So, only four cells around them. Sometimes abominations near edges will see food outside of the enclosure. It is normal. *It is you.*

**Hunger**

They need to consume food. If you don't feed them, they will die. They need to eat more if they are reproducing or creating energy. They will eat automatically, just ensure that they are on the same cell as food.

**Energy Production**

Every creature can produce energy which you in turn harvest. However! It requires species to be well fed and more importantly, making conscious choice to do so. We are not sadists… Well, maybe we are, but this livestock is important enough to let them decide.

**Reproduction**

Same as energy production, you need enough food and willing mass of organs, and voila! you had one thing, now you have two.

Well, that was easy to understand. Now, we are talking about something much worse - genetics! I, personally, have no idea what those used to endure *out there,* but they are extremely adaptable. We are yet to map most of their genome, but from what we know there are two main parts:

**Behavioral Genome**

This part of the genome describes the way those things think. Essentially, it is a set of operations which are applied to a creature's memory. This memory can hold 120 ordered bits and is cyclic by its nature. Mainly, interactions with memory happen in the position of a special organ, “carriage”.

The behavioral genome is not a line of instructions or two lines, like most earthly beings have. It is complex tree-like structure, which consists of 7 main genes:

-FBT: This gene will change the value of memory at the carriage position to the opposite.

-MVL: This gene moves carriage left along the memory.

-MVR: This gene moves carriage right along the memory.

-CND: This gene contains another. This other gene will be activated only if carriage points on activated memory bit.

-LOP: This gene contains another. This other gene will be activated while carriage points on activated memory bit.

-AGR: This gene aggregates two other genes.

-ARA: This gene is a bit tricky. It aggregates two genes and switches between them depending on the bit under carriage. When the first one is actvated, this gene remembers it. When second is activated, it will be automatically activated same number of times

**Unique mutations**

There are parts of genome we have not yet mapped. Unique mutations can only appear normally (or if you order custom). List of unique mutations:

0 – Short-term memory – automatically moves carriage to position 0 and resets all memory at the start of iteration

1 – Photosynthesis – Requires less food to produce energy

2 – Chemosynthesis – Produces small amount of food automatically

3 – Predator – Can eat creatures without this mutation

4 – Long living – Age 4 times slower on average

5 – Cunning – Execute thinking cycle twice every iteration

6 – Caring – When this creature produces offspring, they will share their food equally

7 – Long Genom – Has 10 high level genes instead of normal 5

8 – Soloists – Produce more energy if there are less than 20 creatures in enclosure

9 – Social – Produce more energy if there are more than 45 creatures in enclosure

10 – Communicative – share 5 bits (115-120) with each other

11 – Effective – receive small amount food for producing energy

12 – Nutritious – Put food in their place after death

13 – Precious – cost three times as much if sold

14 – Chaotic – value of bit 114 randomized

15 – Logical – can use genes “AND,ORA,XOR” for applying and,or and xor operations to positions adjacent to carriage and writing result under it

16 – Complex – can use genes “WRT,RTT” to instantly access bit 42

17 – Hypothalamus – bit 109 shows if creature is hungry or not

18 – Unique – bits 103 – 108 contain unique value for each creature

19 - Creative – can only be ordered. Creature does not require food and does not age. It will die instantly instead of producing energy

20 – Binocular vision – bits 97 – 102 contain distance to closest food in front

**Other bits**

**Input bits**

0-3 – indicate presence of food on adjacent tiles in order front, right, back, left

**Output bits**

5-6 – rotation clockwise (00 – no rotation, 01 – right, and so on)

7 – indicates if creature should move forward

8 – indicates if creature should produce energy

9 – indicates if creature should reproduce

**Enclosures**

TBA

Time goes on only in one enclosure! We did it that way to ensure space-time continuum consistency.

**Custom orders**

You can order custom creatures in corresponding txt file. You can add more than one. Those specs will appear in first shop poll.

**Shelf**

You can put creatures on shelf to move them between enclosures or just save for later