Evolution: The RPG

You are a land mammal species on the planet Zvornak, a celestial body with conditions nearly identical to Earth. Humans will not reach it for another 1 million years, or the length of this game. You live on an expansive tropical island with forested terrain and a temperate climate. The rules of natural selection as it exists on Earth mostly apply, with a few modifications to make things simpler. You may design your species to resemble one here on Earth, or you may create new combinations of traits. Your goal is to outlast the other species on the island by surviving natural disasters, successfully competing for resources, and keeping up with natural selection.

**How to Play:**

1. You will be randomly assigned three of six food sources on the island.
2. Choose your reproductive mechanism, method of locomotion, anatomical features, metabolism speed, method of temperature control, and social behavior structure based on which adaptations would suit your conditions best.
3. You will begin with 10 chips, each representing 1,000 members of your species. During each round (10,000 years), you will lose or gain members depending on your conditions. Every other round, a randomly-selected milestone will occur, which will drastically lower the populations of certain species.
4. The first 3 choices (green) allow variance. You can allocate a certain proportion of your population to each selection (e.g. 2 chips on walking, 8 chips on climbing). If a milestone event occurs that targets that selection, you will lose the chips placed on it, but you will keep the ones you placed on the other selection (e.g. you will not go extinct if an event kills all climbers).
5. The second 3 choices (red) allow mutations. You cannot allocate proportions on these, but you may mutate after each turn if it benefits you (swap one feature with another, such as claws for a beak).
6. You win when you are the last species remaining, or when you have the most chips when the game ends.

**Options:**

**Food Sources (randomly assigned 3):**

1. Berries – high in trees (long neck or beak)
2. Ants – high in trees, must extract from trunks (opposable thumbs or long neck)
3. Spiny fruit – high in trees, must open without touching (powerful limbs or opposable thumbs)
4. Nuts – hard to crack (strong jaws or beak)
5. Fish – must catch (powerful limbs or claws)
6. Other player’s species – must catch (strong jaws or claws)

**Locomotion (allocate):**

1. Walking – good for hunting
2. Climbing – good for reaching food sources in trees

**Metabolism (allocate):**

1. Fast – your species is quick but requires more food (half as many offspring per round)
2. Slow – your species requires fewer resources but has a harder time escaping predators

**Temperature Control (allocate):**

1. Hair – warmest, bad for floods
2. Hair + panting – moderate, good for lots of sun
3. No hair – moderate, good for little sun
4. No hair + sweating – coolest, bad for droughts

**Anatomy (choose 2):**

1. Long neck – for reaching foods high in the trees
2. Beak –for eating small fruits & nuts
3. Claws –for hunting
4. Powerful limbs – for hunting or shaking trees
5. Opposable thumbs – for using tools
6. Strong jaws – for hunting and opening nuts

**Reproductive Mechanism (choose 1):**

1. Asexual – double your allotted amount of offspring each round, but cannot mutate or allocate all chips to one selection for each feature (no variance)
2. Sexual – normal amount of offspring

**Social Behavior (choose 1 of each):**

1. Shorter/longer development time – longer development means a larger brain (better survival), but fewer offspring (half as many offspring each round)
2. Camouflage/reproductive displays – reproductive displays mean 10% more offspring, but also increased likelihood of being eaten
3. Independent/Pack – pack structure means better hunting & surviving predation, but also greater population loss due to disease

**Player Rules:**

Competition for Resources:

1. You must have a long neck or climb to reach the first two foods (berries & ants).
2. You must have strong jaws or walk to reach the last two foods (fish & other species).
3. If you do not possess one of the traits in parenthesis next to each food, you cannot use it.
4. For each resource you reach successfully, you gain 20% of your current population after each round as offspring. However, for each resource you compete with other species for, you survive but do not gain any offspring, as only one species can occupy each ecological niche. For every additional competitor on that resource, you lose 10% of your population each round.
5. If your species has twice as many or more members as your competitor species, you take all the resource and your competitor takes a loss.
6. If you have both features necessary to get a resource and your competitor only has one, you get twice as many offspring and your competition gets zero.

Predators:

1. Each predator consumes 10% of your species. If the predator species has twice as many members as the prey species, the predator consumes twice as much, but does not gain any offspring. Any more than that ratio and the predator species takes a loss.
2. Pack species and species with longer development can flip a coin before they are preyed upon each round. Predator calls it, and if the prey wins the toss, they lose no members and the predator species does not gain any offspring for that round. If you have reproductive displays or a slow metabolism, the predator flips a coin and prey calls it. If the predator wins the toss, they consume twice as much.
3. The same rules of competition apply for predators.

**Scorekeeper Rules:**

1. After each milestone, species will tend to gain more offspring as competition & predators are eliminated.
2. Save extinction events for the end of the game.

Milestones:

1. New predator
2. New competitor for food supply
3. Volcano
   1. extinct: slow metabolism walkers
   2. losses: climbers
4. Forest fire
   1. extinct: tree food only
   2. losses: tree food eaters (1/3rd for each resource lost)
5. Global warming
   1. extinct: hair only
   2. losses: hair + panting, no hair only
6. Ice age
   1. extinct: no hair unless have longer development periods
   2. losses: tree food eaters (1/3rd for each resource lost)
7. New disease/parasite
   1. packs lose 50% of population, independents only lose 25%
8. Drought
   1. extinct: no hair + sweating
   2. losses: fast metabolism, fish eaters
9. Flood
   1. losses: hair
10. UV Radiation
    1. losses: no hair
    2. every species has one feature randomly swapped for another

Extinction Events:

1. Hurricane
   1. 10% of each species survives on a raft that floats to the mainland
   2. species with fewer than 10 chips go extinct
   3. mainland is savanna, with only trees, brush, and other species
2. Meteor
   1. 10% of each species survives
   2. low metabolism walker hair long development camouflage pack species take no losses
   3. trump card wins