



Ramiferous Hexaraffes

The third pengling expedition to the Lilac Spherelands was the first to observe the ramiferous hexaraffe in its natural habitat. Previous specimens were only known from scattered skulls, teeth, and armored dermal platelets. In this sunset shot, taken by expedition lumographer Opa Belljump IV, three cormorous skinbirds can be seen at the same watering hole as a hexaraffe pair. The cormorous skinbird's oil glands are prized by the nomad parfumiers of the Southern Route (secondary variant).

Why This Work Exists

With unusual thanks to 'GrinningManiac' for saying "I tried to make a random generator for UVG monsters where it was a bunch of tables that produced things like "Vomish/Mind-Burned/Ka-/Ba-/Ha-" and "Mummies/Centipedes/Lions" but I couldn't quite get it to make anything useful. Anyone had any similar generators?"

With necessary thanks to Jane Goodall for visiting my school when I was young and speaking with such verve and wonder about the living creatures of our world.

With eternal thanks to my wife, who stands by me in spirit though more than eight thousand kilometres of lockdown (and a lot of Russia) separate us.

With gracious thanks to the 470 heroes of the Stratometaship who see value in strange adventures into unknown lands, in search of ineffable creatures.

—Luka, May 2020

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/ 'zoo ə /

Plural form of zoon from New Latin from Greek $z\hat{o}ion$ "animal," derivative from the base of $z\hat{o}\bar{o}$, $z\hat{o}ein$ (Homeric), $z\hat{o}$, $z\hat{e}n$ (Attic) "to be alive, live," going back to Indo-European *gwieh3-(u)- "live" (whence also Tocharian B $\hat{s}ayau$ "[I] live"), full grade of a stem attested elsewhere with zero grade as *gwih3-u-, whence Latin $v\bar{v}v\bar{o}$, $v\bar{v}vere$ "to live," Old Church Slavic $\check{z}iv\bar{o}$, $\check{z}iti$, Old Prussian giwa "(s/he) lives," Latvian $dz\bar{v}u$ "(I) live," Sanskrit $j\bar{v}vati$ "(s/he) lives," Avestan juuaiti.

Source: "Zoo." Merriam-Webster.com Dictionary, Merriam-Webster, https://www.merriam-webster.com/dictionary/zoo Accessed 18.04.2020.

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Warning: Fool of Words

This booklet is full of hard words. Actual scientific jargon, invented words, and even, sometimes, sheer technobabble.

This is intentional. The roleplay conceit is that the heroes are more-or-less competent naturalists on a [faux] grand scientific expedition. The players are not and shouldn't worry about precise pronunciation or meaning. Treat the biological technobabble as inspiration, not instruction.



THE NEOZOA

Why We Are So Wise

Neozoa

Many archaic myth-complexes state that long long ago there was a fixed number of living creature templates in the Given World. The number 400 is often transmitted as the initial number of all the varieties of plants, animals, fungi, protozoa, golems, and sentiences. This number is likely coincidental, since a baseline human has twenty digits on their hands and feet and the phrase 'a score's score' is used as a metaphor for 'countless'.

In these myths, a side effect of the waste-maker's actions was the breakdown of this initial perfect order. Thermidore Notto's translation of the *Pseudovila Lamentika* puts it poetically, "they [the waste-maker] let a hundred corrupted flowers bloom and a hundred hundred seeds to spread and there was a flourishing of the weeds and the axis of the world was thrown off the equilibrium of perfection."

As every contemporary student of the biomantic and vivifactorial arts knows, the variety and number of creatures and hybrids and chimeras is countless and uncountable. The source code of life is ever-plentiful, throwing up innovations from generation to generation. One glow-eyed antelope stretches its neck to reach high branches, its child is born with a neck twice as long, its grandchild thrice as long, and soon a new giraffelope strain is loose upon the sclerophyl savanna. This is the nature of things, and no serious scholic argues that epigenetic recombination is not the dominant and natural form of biological change and adaptation in our world.

Why do we know more things than other peoples? Why, in fact, are we so clever? We have never pondered over questions that are not questions. We have never squandered our strength. Of actual ontological difficulties, for instance, we have no experience. We have never known what it is to feel sinful.

Unlike the degenerate quarterlings—those comical creatures that scuttle in their ragged ruins—we know that a builder for the Given World is a too palpably clumsy solution of things; a solution which shows a lack of delicacy towards us thinkers—at bottom magical builders are really no more than a coarse and rude prohibition of us: ye shall not know!

No, we are much more interested in another question—a question upon which the salvation of humanity depends to a far greater degree than it does upon any piece of constructivist theology. I refer to nutrition.

We feed ourselves to attain the maximum of *virtù*. We feed our city to attain our maximum of power. We ingest the zoa in their green multitudes and excrete waste and reason and technology. Yes! The product of our minds is the product of alimentation. The quarterling intellect is indigestion; it can assimilate nothing, because they surrender animal vigour on the altar of clumsy spirit and prohibitions against the consumption of ought but the 400 pure zoa. This negation of good digestion is the real sin against the imagined builder.

We accept the natural order of the world. Not superfluous and foolish idealism reveling in ignorance of physiological matters. This is simply fact. Present, not given. The world is an orb of change. The vastlands are an endlessly fecund breeding ground of monsters *and* food. Of dangers *and* fuels. Of maladies *and* cures. This is life in its green riot. What has been the greatest objection to life hitherto?—Magic builder. Star Hwah. First Elf.

We are so clever because we do not *think*. We look. We study. We listen. We smell. We taste. We eat. Every year, every moon, every day, every moment, the generative forces of the vastlands create new life. The acumen of two thousand years of academic thought in the decadent arcology villages would not have sufficed to guess the marvels of the fecund Green. Where pious fools consume soil ants, we parade meat trees slathered in the rendered fat of pig bats grilled on fires fed by the emissions of the bloating scums. Where they read fading scratches on scuffed plastic, we print volumes on great sheets of paper oak. Where they sleep under itching garments of hair and polyester, we have finest silk from the pendle spider and armour from the chitin-bearing giant vole.

How have we become so good? So much better than the abundant quarterlings? How we become what we are is down to that masterpiece in the art of self-preservation, which is selfishness. We ride the vastlands and we make them our own. We take the ever-growing zoa of the vastlands and turn them into our food, into our technologies, into our science, into our will to power.

—Zéro Abisés, Unquartered Revolution: Hunting Monsters in the Vastlands

Funding a Research Expedition

Most zoologists and dungeoneers share a major problem: funds. The main difference is that a group of maleducated dungeon hoboes has very limited opportunities to secure expedition funding (or even a steady job).

1. Who is funding it?

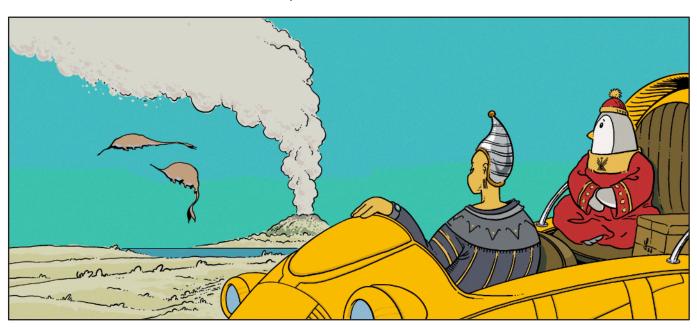
- i. Secret cult of the Blue God.
- ii. R.L.D. institute of applied proletarian sciences.
- iii. Zealous religious research order loyal to the cogflower inquisition.
- iv. E.C. museum on the origin and modification of species.
- v. Investment banking concern.
- vi. Pharmaceutical conglomerate.
- vii. Rich and eccentric philanthropist.
- viii. Heavily indebted and misanthropic capitalist landlord.
- ix. Nouveau riche industrialist.
- x. Multinational circus franchise.
- xi. Secretive military research laboratory.
- xii. Environmentalist country club.
- xiii. Spouse of an autocratic hereditary president.
- xiv. Ambitious general in the transnational circle road consortium.
- xv. Secret enlightenmentist society.
- xvi. Royal republican imperial society.
- xvii. Criminal drug conglomerate.
- xviii. Local governor with cultural inferiority complex.
- xix. Underfunded second-tier university.
- xx. Prestigious aristocratic university.

2. How do they hope to benefit?

- i. Confirmation of their faith.
- ii. Useful and efficient food sources.
- iii. Religious truth-enhancing serums.
- iv. Methods for spontaneously generating of new creatures.
- v. Valuable pets.
- vi. Palliative drugs to optimize life quality over long periods.
- vii. Wonder drugs to help the poor.
- viii. Superior farm animals.
- ix. Sources of industrial raw materials.
- x. Humorous animals or vegetables.
- xi. Weapons-grade monsters.
- xii. Charismatic poster-creatures for fund raising.
- xiii. Proof of the superiority of the state's environmental policies (and a supply of exotic furs).
- xiv. Discrete venoms and toxins.
- xv. Mind-expanding extracts.
- xvi. Prestigious new theories confirming the empire's natural dominance.
- xvii. Opiates for the masses to optimize self-perception over long periods.
- xviii. Attractions for the white elephant zoo project.
- xix. Practical biotechnical processes to justify continued funding.
- xx. Pure science to spur blue ocean disruptive commercial innovation.

3. What extra help do they offer?

- i. Religious oldtech scholar.
- ii. Moral rectitude commissar.
- iii. Slaved logic engine atoning for its machine sins.
- iv. Branch representative of the regional colonial trading company.
- v. Attractive marketing influencer.
- vi. Synthetic human drug sampler.
- vii. Senior big game hunting guide.
- viii. Heretical biomancer agronomist.
- ix. Applied biomechanical engineer.
- x. Uplifting musician humanitarian.
- xi. Vometech-augmented savant researcher.
- xii. Wealthy animal-loving sybarite.
- xiii. Loyal and upright sargeant of the immortal presidential guard.
- xiv. Capable but midly corrupt military quartermaster major.
- xv. Alcoholic bone-reading oracle and dowser.
- xvi. Zealous imperial anthropologist.
- xvii. Nervous biomantically uplifted lower lifeform servant (slave).
- xviii. Unctious but canny bureaucrat.
- xix. Annoying but intensely capable administrative scientist.
- xx. Well-connected aristocratic gentleperson naturalist.



MAKING NEOZOA

Plankton and Fish and Sea Greens and Protein

The Vastlands are full of life. Bacterial colonies burbling away in abandoned radioactive storage caverns. Megamorphic protozoa pulsating in the mud geysers. Fungal hybrids spreading through spore cloud events. Dreaming cycads spliced with symbiotic hydrozoan neural nets, the abandoned products of an earlier noösphere development programme. Dappled saltwater neoamphibians colonizing new volcanic islands burping forth from the mist-shrouded Cyan Sea. Star-gazing machine-riddled birds devoting nights and days to ritual observations of the heavens. The last of the ten thousand ten thousand latter-day sputniks chirping their forgotten electric songs in their near-void orbits about the world.

Worse, the life of the Vastlands demonstrates cruel joy in taunting the would-be taxonomist. Species melt and flow, evolve and hybridize. Populations mutate and corrupt. Life bursts forth, fully formed, from dead matter. Experiences change parents and offspring. Germ plasm reacts to strange commands sent out by ancient, alien machines.

Dans le globe que nous habitons, tout est soumis à des mutations continuelles et inévitables, qui résultent de l'ordre essentiel des chose : elles s'opèrent, à la vérité, avec plus ou moins de promptitude ou de lenteur, selon la nature, l'état ou la siuation des objets; néanmoins elles s'exécutent dans un tems quelconque.

Pour la Nature le tems n'est rien, et n'est jamais une difficulté; elle l'a toujours à sa disposition, et c'est pour elle un moyen sans bornes, avec lequel elle fait les plus grandes choses comme les moindres.

Source: chevalier de Lamarck, Jean-Baptiste Pierre Antoine de Monet, (1802, Ch. 3, p.67), *Hydrogéologie*. http://lhldigital.lindahall.org/cdm/ref/collection/earththeory/id/25153 Accessed 03.05.2020.

How and When to Invent New Creatures?

First, the how. It can be a challenge to find that level of strangeness where a novel creature is familiar enough for every player to grasp and imagine, but odd enough to elicit shared wonder and surprise. The attraction of lovecraftian horrors is their protean, unknowable, indescribable strangeness, but for a game of naturalists documenting new fanciful new creatures, something more relatable is needed. The following process starts with creatures, objects, and environments familiar to the modern human, then proceeds to subvert those.

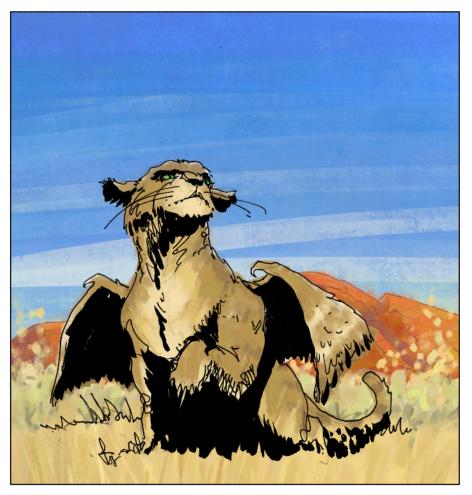
But when to invent creatures? Many games assign this task entirely to the referee, as a solitaire game to play during preparation. A rather different option is to make it part of group play, perhaps as a campfire activity in which the players participate, rolling on the subsequent tables to create the world together, with the referee using the shared ideas as fuel for their subsequent stocking of the world, it's pitfalls and challenges.

Words of the Cavalier of Lamarck

"Upon the sphere we inhabit, all submits to continuous and inevitable mutations proceeding from the essential order of things. The mutations effect swiftly or slowly according to the natures, states, and situations of their objects, but effect they do in their time.

For Nature time is nothing, never a difficulty; ever at her bidding, to her a means without bounds to effect the grandest and the meanest of things."

(translated by L.R., 2020)



Comparing Notes

The embers burn low. The malingering golem butler clears away the silverware and stows the portable kitchen. The members of the esteemed expedition funded by the Neocorporate Society of Letters relax in their wicker chairs and put their feet up on the camp tabourets. The colonel tamps down fresh tobacco in her elaborate fossil-and-resin pipe. The artist on his first expedition fiddles with the shiny buttons on the over-decorated coat his grand aunt, the Director Duchess de Brontamont, foisted on him. The biomancer takes out their machine eye to buff the lens with a chamois cloth. Clearing her throat of phlegm, the doctor takes a drag on her gilt-filtered petit-mor cigarette, then starts the discussion.

"I was reviewing the stutter-fax we picked up in that last trading post. It mentioned a novel fig tree in the Verduzzo Vineland that weeps blood. Did you see that?"

"Ah. The commissar reporting was an imbecile. Trees do not weep blood. It must have been sap or juice," said the colonel.

With a cackle of turning gears the biomancer's voicebox buzzed, "I have heard of sessile terrestrial polypoids. Perhaps it was no fig tree, but some rooted animal or a fungal fruiting body."

And on clattered the discussion, in a circle spun.

Comparing Notes As Play

This game can be played as a campsite, tavern or travel activity. Referees who like to improvise can schedule it at any time during the session, but for those that like to prepare it's best played at the end of a session, after the party has returned to safety.

All the players, referee and runners, play together. For the purposes of this play, the referee can run a sidekick or another useful extra, perhaps even simply a liason in touch with the expedition via crystal vidy-orb. Players should freely use random tables to help them find or improvise new ideas.

Play proceeds clockwise in a circle. The first player takes up thesis token and proposes a lifeform they have heard about. A simple format for the thesis could be: "A <known creature> that does something strange."

The second player in order presents an antithesis, rebutting the initial thesis with a plausible explanation for the creature's odd behaviour.

The third player then presents a synthesis, suggesting that the creature is something else altogether, thus explaining its odd behaviour in a different way.

The second player now takes the thesis token and presents their own thesis about a different lifeform (or even a different strange behaviour by the same creature, but from another source). The following players present their antithesis and synthesis to the new idea.

Play continues until every player has proposed a thesis, antithesis, and synthesis.

The referee can then use these halfbaked rumours and hearsay to stock the landscape ahead with strange and curious lifeforms for the expedition to run into and from.

Neozoa Generator: What is It?

The loosely [dis]connected Generator lists should help come up with a base creature to modify further with the Modificator tables. The aim is to inspire imagination, not serve as a rigorous interconnected generator. The subtables provide additional optional ideas.

Note: these pages will not help pass an actual biology exam.

Lifeform Kingdom [d12]

- Virus. Quintessential parasites dependant on host for replication.
- 2. Bacteria. Hyper-varied prokaryotes.
- 3. Archaea. Eerie extremophiles.
- 4. Protozoa. Single-celled eukaryotes.
- Chromista. Eukaryotes with funky photosynthesizing plastids.
- 6. Plant. Multi-cellular light-eaters.
- 7. Fungus. Chitinous heterotrophs.

- 8. Animal. Eating, breathing, pooping, self-reproducers.
- Vome. Second-order hybrid organic-inorganic self-reproducer.
- Golem. Machine created by sentient animals.
- 11. Undead. Ba-zombies and other soul-stripped creatures.
- 12. Daimon. Disembodied ka-essence.

1. Novel Virus Type [d6]

- i. Necromantic virus, creates undead.
- ii. Vome rewriter, creates biomechanical hybrids.
- iii. Virulently mutagenic. Corrupts host organic source code.
- iv. Gory and haemorrhagic. A plague.
- v. Infectious and debilitating.
- vi. Uplift virus 'improves' host.

Preferred Host [d6]

- i. Dead organic shells.
- ii. Other microorganism.
- iii. Plants or fungi.
- iv. Animals.
- v. Humans.
- vi. Consciousness wavefronts or machines.

Transmission [d6]

- i. Teleportation.
- ii. Air borne dust.
- iii. Aerosolized droplets.
- iv. Contact.
- v. Ingestion.
- vi. Fluid transfer.

2. New-found Bacterium [d8]

- Saprophage consuming dead organic matter.
- ii. Predator. Hunts other microorganisms.
- iii. Lethal pathogen.
- iv. Long-term parasite.
- v. Mutualist symbiote.
- vi. Lithotroph. Eats inorganic matter.
- vii. Phototroph. A 'light-eater' like cyanobacteria (blue-green algae).
- viii. Strange radiation devourer.

3. Interesting Archaean [d8]

- i. Void-adapted microorganism.
- ii. Salt lake halophile.
- iii. Hot spring extreme thermophile.
- iv. Soda lake alkaliphile.
- v. Acidophilic metal extractor.
- vi. Swamp gas methanogen.
- vii. Harmless digestion commensalist.
- viii. Useful cellulose or hydrogenconsuming mutualist.

Appearance [d6]

- i. Thick microbial mat or mound.
- ii. Dense translucent biofilms.
- iii. Migrating fruiting bodies.
- iv. Multicellular aggregates.
- v. Grape-like clusters.
- vi. Spherical cocci or rod-like bacillus.

Unexpected Ability [d12]

- i. Nitrogen-fixer fertilises soil.
- ii. Radioresistant. Breaks down radioactive isotopes.
- Psychrophile adapted to low temperatures.
- iv. Metallotolerant. Isolates useful metals from solutions.
- v. Degrades synthetic materials.
- vi. High-pressure resistant.
- vii. Weakens inorganic compounds.
- viii. Dessiccation resistant. Can be revived indefinitely.
- ix. Deep crust. Deposits metal veins.
- x. Anaerobe. Doesn't need oxygen.
- xi. Fecund fermenter. Novel yoghurt.
- xii. Artificial biological source-code engineering tool.



4. Wriggling Protozoa [d8]

- Elaborate calcium carbonate boulder of organic tubules threaded with multinucleate foraminifera.
- ii. Bag of amoebae in a slime sheath (a slime mold).
- iii. Whirling scourge dinoflagellate mixes photosynthesis and phagotrophy.
- iv. Armored amoebozoan.
- v. Silicon-armored radiozoa.
- vi. Predatory cellular vampire.
- vii. Free-living ciliate paramecium.
- viii. Neuro-modifying parasitic flagellate.

Lifecycles and Ecology [d10]

- i. Dormant cyst in host tissue.
- ii. Infectious oocyst spore.
- iii. Actively feeding trophozoite.
- iv. Phyto- or chemoplankton food chain foundation.
- v. Herbivorous zooplankton.
- vi. Predatory plankton.
- vii. Pathogenic parasite.
- viii. Terminal decomposer.
- ix. Toxic algal blooms.
- x. Bioluminescent blooms.

Movement [d6]

- i. Sessile.
- ii. Swimming.
- iii. Wriggling.
- iv. Nano-silicon wheels.
- Flesh, saliva or feces of intermediate hosts (ticks, flies, mosquitos, cats, cows, other pets).
- vi. Neurally nudged terminal hosts.

Protozoa Diseases [d8]

- i. Water-borne amoebic dysentery.
- ii. Acanthamoeban eye disease.
- iii. Sexually transmitted flagellates.
- iv. Trypanosomal sleeping sickness.
- v. Ulcerating leishmaniasis.
- vi. Malarial plasmodium analogue.
- vii. Brain-altering toxoplasmosis.
- viii. Hive-mind assimilation symbiote.

5. Colourful Chromista [d8]

- i. Free-swimming happy haptophyte.
- ii. Gross oomycotal plant blight.
- iii. Fantastic pennate diatom algae.
- iv. Radially symmetric centric diatom.
- v. Flagellated golden algae.
- vi. Enormous brown algae kelp.
- vii. Floating brown algae island colony.
- viii. Engineered proto-sentient networked atmosphere regulators.

Lucrative Applications [d12]

- Alginate gelling agents for gelatinous servitor development.
- ii. Biohydrogen production.
- iii. Hydrothermal biofuel liquefaction.
- iv. Bioplastic manufacture.
- v. Seaweed fertilizer.
- vi. Livestock feed.
- vii. Basic food source or snake-oil nutritional supplement.
- viii. Pigment manufacture.
- ix. Water scrubbing.
- x. Terrain biomodification.
- xi. Atmospheric engineering.
- xii. Floating island development.

Unfortunate Side Effects [d8]

- i. Toxic blooms and fish kills.
- ii. Underworld suffocation.
- iii. Atmospheric imbalance.
- iv. Aquatic oxygen depletion.
- v. Accidental territory repigmentation.
- vi. Noxious smell from rotting bloom.
- vii. Feral gelatinous servitor population explosion.
- viii. Proto-sentient homeostatic atmosphere system begins actively regulating planet-wide viral anthropoid infection.

6. Finally Plants [d12]

- i. Red alga.
- ii. Fecund green alga.
- iii. Moss or liverwort.
- iv. Fern or horsetail.
- v. Primeval chubby cycad.
- vi. Highly diversified ginkgoform.
- vii. Somber conifer.
- viii. Deciduous tree.
- ix. Vine or creeper.
- x. Flowering herb.
- xi. A shrubbery.
- xii. Colourful grass.

Water Plant Features [d8]

- Form as crustose deposits.
- ii. Coralline thallus and stems.
- iii. Calcium carbonate shells.
- iv. Air-filled floation bladders.
- v. Stabilizing macroflagellae.
- vi. Free-floating forests.
- vii. Symbiotic paddlefish.
- viii. Carnivorous blood-drinking tendrils.

Land Plant Features [d20]

- i. Succulent body.
- ii. Viridian carpet or pillowy hummocks.
- iii. Tuberous food stores.
- iv. Swift growth.
- v. Tempting, colourful fruit.
- vi. Edible nuts or seeds.
- vii. Deep root structure.
- viii. Massive trunk.
- ix. Protective thorns.
- x. Fine hairs.
- xi. High-quality wood.
- xii. Nutritious leaves.
- xiii. Fire-resistant bark.
- xiv. Poisonous flesh.
- xv. Sticky sap.
- xvi. Mutualistic fungi.
- xvii. Symbiotic insects or birds.
- xviii. Carnivorous adaptations.
- xix. Limited mobility.
- xx. Pretty flowers.

Jolly Fungi [d10]

- i. Unpleasant infectious fungus.
- ii. Helpful burbling, fermenting yeast.
- iii. Vibrant mold colony.
- Principled decomposer. iv
- Edible fruiting body. V.
- Toxic mushroom. vi.
- Psychoactive toadstool. vii.
- Medicinal button.
- Elaborate tinder fungus.
- Vast rhizomal information backbone of local noösphere.

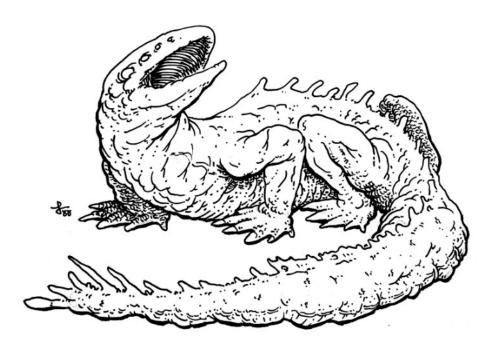
Mushroom Morphology [d20]

- i. Gilled cap.
- ii. Inkcap.
- iii. Fairy circle.
- Bolete.
- Puffball. V.
- Stinkhorn. vi.
- vii. Morel.
- viii. Nest.
- ix. Trumpet.
- Club. X.
- Coral. xi.
- Saddle. XII.
- xiii. Hoof.
- xiv. Polypore.
- Oyster.
- xvi. Antler fungus.
- xvii. Spindles.
- xviii. Shield.
- xix. Bracket fungi.
- xx. Modified smallfolk house fungus.

Diverse Animals [d100]

- 1. Sessile filter feeder (sponge).
- 2. Tentacle-fringed ctenophore.
- 3. Free-swimming jelly (scyphozoa).
- 4. Box jelly (cubozoa).
- 5. Sessile hydra.
- 6. Venomous swimming hydrozoa colonoy (man o' war).
- 7. Soft coral.
- 8. Rock coral.
- 9. Sessile predatory anemone.
- 10. Vaguely fish-shaped animal (or cephalochordate).
- 11. Filter-feeding tunicate or squirt.
- 12. Skull-worm or hagfish.
- 13. Jawless fish (lamprey).
- 14. Armored fish (placoderm).
- 15. Cartilaginous fish (shark or ray).
- 16. Sturgeon or paddlefish.
- 17. Eel or other anguilliform.
- 18. Catfish, carp, or piranha.
- 19. Herring or other clupeomorph.
- 20. Perch, seahorse, or tuna (percomorph).
- 21. Salmon or salmoniform.
- 22. Haddock or anglerfish.
- 23. Guppy or killifish.
- 24. Lobe-finned fish (coelacanth).
- 25. Proto-amphibian (temnospondyl).
- 26. Squamous salamander.
- 27. Hopping frog or toad.
- 28. Proto-mammal (dimetrodon).
- 29. Early-therapsid insectivore.
- 30. Curious platypus or other egglaying monotreme.
- 31. Hopping marsupial.
- 32. Marsupial insectivore, possum.
- 33. Armadillo or glyptodon.
- 34. Sloth or anteater.
- 35. Placental lagomorph or rodent.
- 36. Pangolin.
- 37. Hvaenid.
- 38. Civet or genet (viverrid).
- 39. Cat, lion, or smilodon (felid).
- 40. Dog or wolf (canid).
- 41. Bear or panda bear (ursid).
- 42. Skunk, red panda, weasel, otter, badger, or raccoon (musteloid).
- 43. Seal or walrus (pinniped).
- 44. Mole, hedgehog or shrew.
- 45. Flapping bat or gliding colugo.
- 46. Primate or post-human.
- 47. Deer, giraffe, cow, camel, pig, antelope, hippo, sheep, or alpaca.

- 48. Whale or dolphin.
- 49. Horse, rhino, elephant, mammoth, manatee or sea cow.
- 50. Tuataran.
- 51. Fish-lizard (ichthyosaur)
- 52. Squamate snake.
- 53. Squamate lizard.
- 54. Tortoise or turtle.
- 55. Aquatic long-neck (plesiosaur).
- 56. Crocodilomorph.
- 57. Flying reptile (pterosaur).
- 58. Dinosaur, very large herbivorous.
- 59. Dinosaur, possibly feathered.
- 60. Flying feathered dinosaur (bird).
- 61. Ground-dwelling bird (ostrich).
- 62. Star.
- 63. Urchin.
- 64. Cucumber.
- 65. Trilobite (artiopod).
- 66. Spider.
- 67. Scorpion.
- 68. Tick.
- 69. Centipede or millipede (myriapod).
- 70. Horseshoe crab (xiphosura).
- 71. Crab, lobster, or shrimp (decapod).
- 72. Mantis shrimp (stomatopod).
- 73. Wasp, ant or bee (hymenoptera).
- 74. Mantis (mantodea).
- 75. True beetle (coleoptera).
- 76. Grasshopper or cricket (orthoptera).
- 77. True bug (hemiptera).
- 78. Butterfly (lepidoptera).
- 79. Fly or mosquito (diptera).
- 80. Dragonfly (odonata).
- 81. Antlion or mantis-fly (neuroptera).
- 82. Cockroach or termite (blattodea).
- 83. Stick insect (phasmatodea).
- 84. Flea (phasmatodea).
- 85. Louse (siphonaptera).
- 86. Nematode worm.
- 87. Rotifer or wheel animalcule.
- 88. Predatory arrow worm.
- 89. Flatworm.
- 90. Snail or conch.
- 91. Slug.
- 92. Nudibranch or sea hare.
- 93. Bivalve clam or oyster.
- 94. Chiton.
- 95. Squid.
- 96. Octopus.
- 97. Cuttlefish.
- 98. Nautilus or ammonite.
- 99. Earthworm or other oligochaete.
- 100. Leech or hirudinean worm.



9. Various Vomes [d12]

(machine-organic hybrids)

- i. Wire corpse activator.
- ii. Cybernetic death machine assimilator.
- iii. Bioneural machine parasite.
- iv. Plant biomatter repurposer.
- v. Rhizomal war recycler.
- vi. Protozoaborg swarm.
- vii. Distributed invertebrate machine consciousness.
- viii. Biofuel ungulate-bacterial mech.
- ix. Fibre optic scout avian.
- x. Nuclear-powered worm-mammal composite colony.
- xi. Symbiotic purpose calculator.
- xii. Crystal matrix hive uplifter.

10. Fully Synthetic Golems [d12]

- i. Silicon-based 2nd-order life form.
- ii. Warped stuckforce unit.
- iii. Crystal-locked conscious light.
- iv. Coherent sentient plasma.
- v. Active liquid unity.
- vi. Microclastic sand creature.
- vii. Ferrometallic synthetic.
- viii. Polished jewel machine.
- ix. Ceramic composite archaic.
- x. Plastic automaton.
- xi. Repurposed organic model (wicker, bone, flesh, wood, chitin).
- xii. Full neobiological synthetic.

Machinoid Morphology [d12]

- i. Synthetic protozoan colony.
- ii. Metal insectile swarm.
- iii. Scuttling polypede.
- iv. Burrowing rodent-form hive.
- v. Canine varietal.
- vi. Bipedal avian flock.
- vii. Torpedo-like swimmer.
- viii. Bipedal primatomorph.
- ix. Thunderous beast.
- x. Rumbling vehicle.
- xi. Grand ship.
- xii. Crawling city-factory.

Mechanical Superiority [d20]

- i. Wideband optics and sensors.
- ii. Accelerated reactions.
- iii. Environmental resilience.
- iv. Augmented speed.
- v. Shock combat protocols.
- vi. Synthetic strength.
- vii. Reactive armor.
- viii. Stuckforce shielding.
- ix. Nanoscale maintenance toolkit.
- x. Microscopic precision.
- xi. Fire and forget rocket drones.
- xii. Quantum processor.
- xiii. Autonomous scout swarm.
- xiv. Deep learning memory banks.
- xv. Microfusion reactor.
- xvi. Zero-point crystal blasters.
- xvii. Void engines.
- xviii. Inorganic material reprocessors.
- xix. Gate drive.
- xx. Fractal self-replication system.

11. Ba-retentive Undead [d12]

- i. Reactivated rendered organic slurry.
- ii. Basic necroplasmid zombie.
- iii. Pickled reused organic.
- iv. Mummified dryland labor unit.
- v. Polished skeleton rabotnik.
- vi. Worldbound shell (lich).
- vii. Augmented metabolism ghoul *ka*-nnibal parasite.
- viii. Blood-symbiote activated post-mortal (vampire).
- ix. UV radiation activated paramortal.
- x. Piecemeal necro-augmented elder.
- xi. Augmented neorganic parasitic neural network (bodythief brain).
- xii. Soulsold abmortal.

12. Bodiless Ka-Daimons [d12]

- Terminal transdimensional emanation.
- ii. Radiation ghost.
- iii. Viral intelligent life enabler.
- iv. Alien void probe.
- v. Dancing echo of creation.
- vi. Dream hunter.
- vii. Emotion eater.
- viii. Lesser intellect nest generator.
- ix. Expression of the noösphere.
- x. Smeared spacetime explorer.
- xi. Far future refugee.
- xii. Apocalypse avatar.

Neozoa Modificator: How is It Strange?

The Modificator tables change the appearance, behaviour, and ecology of creatures. They may create unusable creatures. It is up to the players to decide whether they want to explain such aberrations or start again.



- Void corruption
- 2. Gate mutation
- 3. Feral synthetic recombination
- 4. Mechanical assimilation
- 5. Biomachine integration
- 6. Cosmetic transformation
- 7. Adapted morphology
- 8. Sensory redesign
- 9. Radical locomotive change
- 10. Metabolic adjustment

Mechanical Assimilation [d6]

- Germ-line synthetic para-neural network assumes control as creature gets older.
- Nanosurgically integrated drone.
- Crystal brain implant.
- iv. Bionic combat augmentation.
- Full body cybernetic restructuring.
- vi. Quantum processing unit of distributed electromagical web.

Biomachine Integration [d6] 5.

- i. Anti-gravity kernel.
- ii. Jump rockets.
- iii. Hydrogen floation sacs.
- iv. Fuel refining metabolism.
- Integrated powered paraskeleton. V.
- Chemical weapon exhausts.

Cosmetic Transformation [d6] 6.

- i. Modified skin covering, fur, feathers, scales or platelets.
- Strange colour and texture.
- Camouflage colouration.
- iv. Conscious colour modification.
- ٧. Controlled bioluminescence.
- Vivid eye-burning iridescence.

- 11. Behavioural modification
- 12. Neural recoding
- 13. Ecological disruption
- 14. Social transition
- 15. Cultural revolution
- 16. Incompetent redesign
- 17. Naive reintroduction
- 18. Intelligent upgrade
- 19. Post-classical adaptation
- 20. Reality puncture

7. Adapted Morphology [d6]

- Monstrous gigantism, buildingsized with more scope to grow.
- Unexpected gigantism.
- Robust or gracile adaptation.
- iv. Modified limbs or neck.
- V. Additional limbs or heads.
- Dwarfism or miniaturization.

Sensory Redesign [d6]

- External sense organs absent, relies on 'psychic' brain organelles.
- Reduced visible organs.
- iii. Nocturnal adaptation.
- Hypersensitive modification.
- Novel electromagnetic, gravity, or magic senses penetrate obstacles.
- Telepathic abilities.

Radical Locomotive Change [d12]

- i. Sessile. Possibly rooted.
- Limbless, burrowing adaptation.
- Superior swimming.
- Fast running and leaping. iv.
- V. Biomechanical wheels.
- vi. Bipedalism or quadrupedalism.
- Brachiator, tree-swinger.
- viii. Gaseous or sorcerous floating.
- ix. Active or gliding winged flight.
- Neorganic rocket or jet propulsion.
- xi. Organic anti-gravitic capabilities.
- xii. Fight or flight tele-translation.



Void Corruption [d6]

- Flesh replaced with protean assimilator colony.
- ii. Endlessly growing energy absorber.
- Living gestator for horror of tentacles and barbed limbs.
- Shadow is a parasitic siphon. iv.
- Driven by alien brain parasite. V.
- Changeling heat death survivor.

2. Gate Mutation [d6]

- Partly dislocated in space time. i.
- ii. Phases through solid objects.
- Activates dormant gates. iii.
- Attracts gate worms tunnelers. iv.
- Intestinal matter siphon gate. V.
- Explodes in magical gate fields.

Feral Synth Recombination [d6]

- Self-destruction organ. i.
- Energy discharge machine endosymbionts.
- Industrially useful waste byproduct metabolism.
- Defensive synth exosymbionts.
- Machine-protective instincts. V.
- Expanded brain-machine interface for real-time two-way comms.

10. Metabolic Adjustment [d8]

- Void energy feeder. i.
- ii. Radionuclear core.
- iii. Ka-vampire or life-stealer.
- Biological combustion engine. iv
- Alternative chemical metabolism. V.
- vi. Photosynthetic symbiotes.
- vii. Herbivore or carnivore.
- viii. Matter converter.

11. Behavioural Modification [d6]

- Hyper-aggressive death organism. i.
- ii. Cunning stalker.
- Behavioural imprinter with brainiii. modifying learning symbiote.
- iv. Intelligent strategist.
- Friendly altruist.
- vi. Obligate pacifist.

12. Neural Recoding [d6]

- Fully sentient uplift.
- ii. Virtually intelligent.
- iii. Upgraded preprogrammed germline behaviour transmission.
- iv. Reflex-boosted.
- Empathically neuro-slaved drone. V.
- vi. Mind-burned brainless automaton.

13. Ecological Disruption [d6]

- Apex hypercarnivore maintaining food-web balance.
- ii. Natural gardener.
- iii. Crucial floral pollinator or disperser.
- iv. Soil-making detritivore.
- Direct chemical ecology shaper. V.
- Technomagical field emitter.

14. Social Transition [d8]

- Isolating hermit creature, suffers actual pain in presence of others.
- Solitary predator or parasite. ii.
- iii. Pair-bonded couples.
- iv. Natural pack creature.
- V. Social, herd, or communal being.
- vi. Requires symbiosis or camaraderie to survive.
- vii. Hive organism.
- viii. Super-organism or hybrid organism without independent individuals.

15. Cultural Revolution [d6]

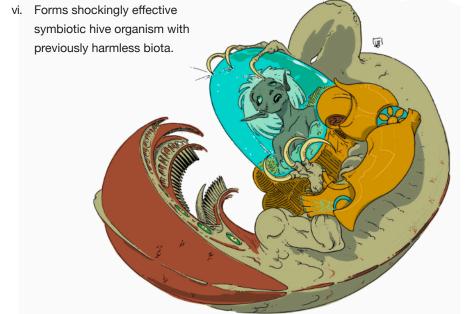
- Uses fire.
- ii. Uses language.
- Culturally transmits information between generations.
- Domesticates other creatures. iv.
- Uses wood and stone tools.
- vi. Creates art.

16. Incompetent Redesign [d6]

- i. Pointlessly re-enacts dead rituals.
- Harvests and processes raw materials for long gone masters.
- Left much more intelligent and resilient, but horrifically ugly by incompentent re-engineer.
- iv. Manufactures obscure artifacts out of inappropriate materials like an instinctual cargo cultist.
- Angelic beauty and lethally compromised survival instincts.
- Flawed biological assimilator with penchant for monumental art.

17. Naïve Reintroduction [d6]

- Regresses and metamorphoses throughout life cycle to suit changing conditions, becomes a virulent pest.
- Dangerous extinct varietal reintroduced and upgraded for entertainment ratings.
- Thoroughly domesticated, incapable of independent life.
- Unexpected post-mortem life cycle stage upsets ecological balance.
- Surprisingly rapid breeding.



18. Intelligent Upgrade [d6]

- Magitechnic secondary locomotion.
- ii. Integrated bioenergy weapon.
- iii. Evolutionary leapfrogging.
- Selectively modified slave hive service organism.
- Asexual parthenogenetic creature cleansed of sin. instinct, and drive.
- vi. Lamarckian nanomechanical continual forced infinite selfadaptation module.

19. Post-Classical Evolution [d6]

- Intense capability decline through domestication.
- Feral regression post culture collapse.
- Island dwarfism or gigantism.
- Rapid morphological diversification after radiation event.
- Niche hyper-specialization.
- Second-order meme-driven modification.

20. Reality Puncture [d6]

- Accidental space-time fragmenter.
- ii. Entire species travels sideways through time.
- Creature represents higher dimensional intrusion or spill.
- iv. Temporal bleed slows or accelerates species biology.
- Metabolism drains reality of vitality.
- Vastland creator unit expands really-existing scope of reality when it dreams.



Keeping a Journal of Neozoa

If the players agree that their roleplay should be about exploration and the observation of new creatures, they may agree to **keep a journal to record their expedition(s)**. If they do so, the referee should consider doubling their exploration experience.

In addition to a group cartographer who maps the world they explore, one player could be the zoologist recording new animals, a third could be the botanist recording new plants, a fourth could be the expedition artist, illustrating the creatures found by the group, and a fifth could be the expedition quartermaster, managing the caravan and coordinating their defense against unexpected threats.

Players shouldn't be put off if they feel they do not have artistic or literary skill. Drawing stick figure animals and writing doggerel descriptions of creatures is perfectly acceptable.

Idea credit: the author first experienced journaling-as-roleplay in a game run by Ahimsa Kerp, Knight Owl Publishing.

STUDYING THE ZOA

Experience for the New

Simply observing new zoa in their more-or-less natural environments, and wondering at their beauty (or ugliness) and grace (or horror) is an experience in and of itself. In a couple of brief paragraphs on page 146 the *Ultraviolet Grasslands* (2019) encourage players to explore, discovering new places, animals, plants, and anomalies for experience. They suggest heroes gain experience points (xp) for observing new creatures they have never seen before, and for studying unfamiliar organisms in detail. How does it work?

Observing New Creatures

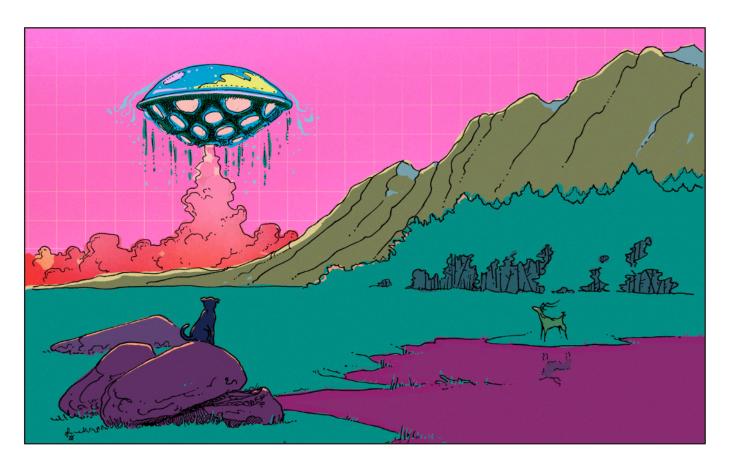
In play, when a hero spends some time (five minutes? a quarter of an hour?) observing an unfamiliar lifeform with at least two senses they gain experience equal to the creature's level x 10 (minimum of 5 xp for 0 level creatures). Every veteran roleplayer will immediately understand how this explains the popularity of zoos: they are xp farms.

Before awarding xp it is a good idea for the referee to ask each player present during the observation to make one simple statement about the new creature, like in the parable of the *Blind Men and an Elephant*:

A group of blind men heard that a strange animal, called an elephant, had been brought to the town, but none of them were aware of its shape and form. Curious, they said, "We must inspect and know it by touch, of which we are capable." So they sought it out and when they found it they groped about it. The first person, whose hand landed on the trunk, said "This being is like a thick snake." To another, whose hand reached its ear, it seemed like a kind of fan. Yet another, whose hand was upon its leg, said, "The elephant is a pillar like a treetrunk." The one who placed his hand upon its side said "The elephant is a wall." Another, who felt its tail, described it as a rope. The last felt its tusk and stated "The elephant is that which is hard, smooth and like a spear."

Source: Adapted from "Blind Men and An Elephant." Wikipedia, https://en.wikipedia.org/wiki/Blind_men_and_an_elephant Accessed 28.04.2020.

Any players who were absent during the session when the creature was observed could be asked to draw the creature based on the observations. The resulting artistic oddities would complement the observations to make a fun bestiary for the group.



Questions to Ask

Whether players are creating a new lifeform or making observations of a creature encountered during play, knowing what to ask helps spur the creativity. A group doesn't need to answer all of these questions, a few will do.

1. Senses

- i. How does it look?
- ii. How does it smell?
- iii. What sounds does it make?
- iv. What is it like to the touch?
- v. How does it taste?
- vi. What odd feelings does it provoke?

2. Taxonomy

- i. Does it have physicality or is it incorporeal or ghostly?
- ii. Is it living or dead (or undead)?
- iii. Is it a eukaryote or a prokaryote?
- iv. Is it a protozoan or a chromist or something else?
- v. Is it a plant, a fungus, or an animal?
- vi. Is it a single organism or a superorganism or colony?

3. External Appearances

- i. Does it have a discrete boundary or is it diffuse and porous?
- ii. Does it look coherent and singular or composite and chimeric?
- iii. How big or small is it?
- iv. How bulky or slender is it?
- v. Does it have skin? Is its skin covered in mucus, scales, fur, feathers, or something else?
- vi. Does it have warning or camouflage patterns?

4. Biomechanics

- i. Can it move or is it sessile?
- ii. Does it have some kind of support structure or not?
- iii. Does it use muscles or hydraulics or tension or something else?
- iv. Does it have an endoskeleton or an exoskeleton?
- v. Does it have limbs or not?
- vi. What kind of locomotion does it have? Does it fly, swim, walk, burrow or something else?

5. Initial Ethology

- i. How active does it appear?
- ii. Does it seem to eat? What does it eat? Does it hunt or not?
- iii. Does it seem threatening, harmless, or flighty?
- iv. Does it appear intelligent or purely instinctual?
- v. Is it alone or in a group of similar organisms? How large is the group?
- vi. Does it appear to be in a symbiotici or parasitic relationship with any other organisms?

6. Immediate Environment

- i. Is it night or day? How bright is it?
- ii. How rugged is the terrain?
- iii. How much water is there?
- iv. Is the environment lush, rich in other biota, or barren?
- v. How disturbed is the environment?Are there buildings or ruins?Magical or industrial pollution?
- vi. Is it suited to its surroundings?

Presenting Neozoa to the World

When the heroes actively research creatures, creating a faux bestiary or encyclopaedia entry about the new creature could certainly be part of the game, doubling their exploration experience as with the observations.

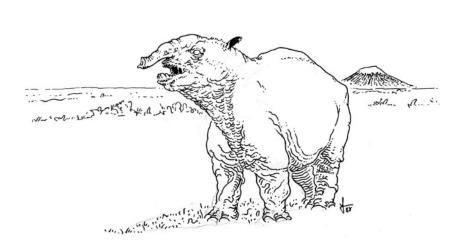
An additional quest that would fit the theme very well is presenting the research findings to their expedition backers in the capital (or the Violet City or some other far off, hard to reach city). To successfully share their knowledge heroes need to:

- Store their research notes, sketches, and samples (1 stone per researcher per round of research).
- Deliver an in-person presentation for their backers (and possibly the interested naturalist public).
- iii. Gain 1d6 + charisma x 10 xp.

Could heroes also fake their findings? Certainly. But this would carry very real reputational risks and very likely devolve into near-slapstick comedy.

Problems With Faked Research [d8]

- Deadly biomantic plague breaks out and all initial attempts to stop it fail because of faked research.
- ii. Local populist politician uses faked research to 'prove' they are the better candidate, winning on an extreme malthusian platform.
- Quack remedy based on research gains popularity, preventable diseases exact gruesome toll.
- iv. Venerable regional institution is shut down under new conditions.
- New policies underpinned by falsified principles lead to mass crop failures and hunger.
- vi. Research is used to justify forced labor policies in line with social neozoan principles.
- vii. Immense amounts of resources are wasted on dead-end research, eroding trust in new technologies.
- viii. Researcher attains celebrity status, but must keep their lies a secret.



Researching Creatures in Depth

If a hero want to actually learn something useful (or at least something they could publish in an academic journal) about an organism, they have to invest a significant amount of time and effort observing the biology, behaviour, and habitat of the organism. Each hero participating in the research for 1d6*+1 days gains $(1d6+thought) \times 10 \times p$.

I will give only one other instance of an habitual and purposeless movement. The Sheldrake (*Tadorna*) feeds on the sands left uncovered by the tide, and when a worm-cast is discovered, "it begins patting the ground with its feet, dancing as it were, over the hole;" and this makes the worm come to the surface. Now Mr. St. John says, that when his tame Sheldrakes "came to ask for food, they patted the ground in an impatient and rapid manner." This therefore may almost be considered as their expression of hunger. Mr. Bartlett informs me that the Flamingo and the Kagu (*Rhinochetus jubatus*) when anxious to be fed, beat the ground with their feet in the same odd manner. So again Kingfishers, when they catch a fish, always beat it until it is killed; and in the Zoological Gardens they always beat the raw meat, with which they are sometimes fed, before devouring it.

Source: Darwin, Charles, (1872, Ch.1), *The Expression of the Emotions in Man and Animals*. https://www.gutenberg.org/files/1227/1227-h/1227-h.htm Accessed 28.04.2020.

To make this kind of research more fun, besides describing the creature, one of the players may roll to see how their heroes carried out their research and another may roll to see what [possibly] useful discoveries their heroes have made about the organism (see table overleaf). If the heroes want to continue researching the same organism, one of them should make a difficult thought test. If they fail, they simply do not have the tools, insights, and resources to find out any more useful information at present. If the heroes are doing research in the field, in the Ultraviolet Grasslands say, one of the players should roll for mishaps as usual.



Research Events

Fictional science is a lot like guard duty. Long stretches of mind-numbing boredom, interspersed with moments of sheer terror. Players should choose a different column every time they roll, or just roll a d40.

1. Humorous Events [d10]

- Dead sample was only hibernating and pining for the fjords.
- ii. Test subject unexpectedly voided itself on researcher.
- iii. Fluid sample stored in coffee flask.
- iv. Parasite sample preserved in bottle of fine hyacinth spirits.
- v. Slippery discarded integument causes slapstick fall.
- vi. Sampling operation causes harmless gas explosion.
- vii. Itchy creature uses sanitary facilities as rubbing post. Knocks them over.
- viii. Reagents have unexpected euphoric side effects.
- ix. Missing key component discovered in last pocket on the left.
- x. Sample escapes, causes greased pig chase scene.

2. Mundane Events [d20]

- i. Arachnid analogue nests in boot.
- ii. Entertainment system breaks down.
- iii. Insect analogues infest bedding.
- iv. Gastropod analogues attracted to warmth and humidity of camp.
- v. Tiny swarming zoa blot out lights.
- vi. Outbreak of mild digestive disorder.
- vii. Scavengers adopt camp.
- viii. Frustrating yeast infection spreads.
- ix. Weather conditions confine most of group indoors for days on end.
- x. Curious small local creature adopts one of the heroes as a pet.
- xi. Fast-growing fungus colonizes vehicles or mounts.
- xii. Samples spoiled by unseasonable temperatures.
- xiii. Moss grows heavily on tents and other structures.
- xiv. Camp area becomes waterlogged.
- xv. Burrowing rodents gnaw wheels and packs.
- xvi. Trees release masses of fine pollen.
- xvii. Latrine overflows. Foul smell.
- xviii. Herbivore herd moves into area.
- xix. Predators scout the camp.
- xx. Romantic weather conditions combined with a scenic spot prompt heartfelt conversations.

3. Terrifying Events [d10]

- Parasitoid creature injects researcher with its ovipositor.
- ii. Neuro-modifying fungus infection.
- iii. Apex predator tracks.
- iv. Traces of active void corruption mutating samples in vivo.
- v. Dissection subject suddenly begins to speak, begging for mercy.
- vi. Glandular hive-mind dominates subject after subject, turning them into slaved drone creatures.
- vii. Lethal virus jumps species barrier.
- viii. Dormant vomish assimilator machines within subject reactivate.
- ix. Cute small creatures begins multiplying with terrifying speed.
- x. Ka-ghost jumps from subject to subject, seeking a new host.

Naturalist Discoveries [d20]

When heroes research their new-found subject in depth, they may make mistakes, discover new useful information, or even completely overturn everything they thought they new about the organism. It's up to the players at the table to figure out how to reconcile the new-found creature with the world they inhabit.

- 1. Misleading results
- 2. Worthless nonsense
- 3. Curious correlation
- 4. Statistical noise
- 5. Void response patterns
- 6. Spiritual vital essences
- 7. Distributed cognition
- 8. Luminous adaptation
- 9. Synthetic corruption
- 10. Biomechanical superiority

1. Misleading Results

- i. Seems edible, but is horribly toxic.
- ii. Seems mostly harmless, but is a brutal infiltration predator.
- iii. Seems like a familiar species, but is actually a cunning mimic.
- iv. Seems useful, but is also a terrible agricultural pest.
- Seems perfect for controlling an invasive pest, but is itself a terrible invasive pest.
- vi. Seems like a lovely pet, but carries mind-controlling parasites.

2. Worthless Nonsense

- i. Lifecycle is pointlessly complicated.
- ii. Can be kept as pet if ridiculous ritual rules are followed.
- iii. Produces atrocious cloying smell when nervous, which is often.
- iv. Curious unladen airspeed velocity.
- v. Performs badly on tests designed for other species.
- vi. Dies if dropped in lava.

3. Curious Correlations

- i. Popular pet in three failed societies.
- ii. Produces perfectly spherical, shiny dung pellets.
- iii. Only mates during eclipses.
- iv. Looks extra perky when allergy sufferers are suffering.
- v. Produces unlicensed substance used by historical top athletes.
- vi. Glows when magic is used nearby.

- 11. Lingish uplift
- 12. Posthuman derivative
- 13. Useful resource
- 14. Medical applications
- 15. Edible creature
- 16. Food creature
- 17. Labor creature
- 17. Labor create
- 18. Exotic pet
- 19. Militarily useful
- 20. Valuable horror

4. Statistical Noise

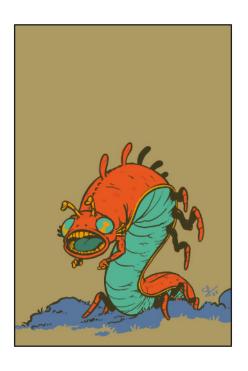
- i. Forms complex hybrid populations.
- ii. Migrates in a chaotic pattern.
- iii. Coloration varies in correlation with the presence of a minute beetle.
- iv. Unpredictable immune system response to common diseases.
- v. Behaviour varies with temperature and humidity in complex ways.
- vi. Responds semi-randomly to noise.

5. Void Response Patterns

- i. Leaks void corruption.
- ii. Incredibly susceptible to void corruption. Mining canary effects.
- iii. Requires magical spillage to successfully mate.
- iv. Siphons technomagic emanations.
- v. Transforms into upgraded form when exposed to void.
- vi. Void-adaptation makes it immune to source corruption.

6. Spiritual Vital Essences

- Biological machine operated by a non-sentient *ka*-spirit.
- ii. Teleports in its sleep.
- iii. Borrows other bodies to help spot prey and/or predators.
- iv. When its physical form dies it rebuilds itself from gross matter.
- v. Phases out of sync with reality to escape threats.
- vi. Creature is infested with *ka*-parasites that replicate within its neural matrix.



7. Distributed Cognition

- Distributes single ba-consciousness among multiple individuals.
- ii. Replicates *ba* via parthenogenetic reproduction.
- iii. Telepathically dominates host species.
- iv. Intelligence increases with group size.
- v. Becomes sessile and goes into fruiting body stage when isolated.
- vi. Parasitically leeches cognitive cycles off other nearby creatures.

8. Luminous Adaptation

- i. Feeds on electromagnetic radiation.
- ii. Precision bioluminescence.
- iii. Radiant flashes to stun prey or blind predators.
- iv. Translucent in bright light.
- v. Secretes infectious crystals loaded with *ka-ba* copies.
- vi. Communicates via tight-beam coherent light emissions.

9. Synthetic Corruption

- i. Symbiotic brain-machines generate hive mind.
- ii. Living metal exoskeleton.
- iii. Biological nuclear micro-reactors.
- iv. Leak dangerous radiation.
- v. Error-riddled baseline machine code mutates creature daily.
- vi. Assimilates foreign neural tissue to operate obsolete nanotechnological noosphere subroutines.

10. Biomechanical Superiority

- Cellular machinery exudes specially modified protective covering.
- ii. Light-transmitting neuro-fibres boost reaction speed.
- iii. Ferrous endoskeleton increases durability.
- iv. Mouthparts modified with electrochemical projectile weapons.
- v. Distributed necro-synthetics reactivate creature after death.
- vi. Secondary processor increases intelligence and memory.

11. Lingish Uplift

- Spontaneously self-generates in suitable environment.
- ii. Lamarckian pan-environmental adaptability.
- iii. Emits euphoric gases when surrounded by sentient beings.
- iv. Limbs adjusted for tool use.
- v. Servile with proper command line language use.
- vi. Exhibits full sentience.

12. Post-Human Derivative

- Degenerate insensate descendants of aristocratic pleasure caste.
- ii. Brutish predators practicing endoparasitoidal reproduction.
- iii. Herbivorous herd creatures developed from excess labor caste.
- iv. Escaped laboratory post-humans.
- v. Aquatic blubber philosophers.
- vi. Humanoid sentience translated into insectile hive colonies.

13. Useful Resource

- i. Flesh makes fantastic fertiliser.
- ii. Bone matter useful in construction.
- iii. Neural tissue has excellent lubricant properties.
- iv. Fatty tissues work well with exuberant combustion engines.
- v. Membrane, capsule, or skin makes good leather analogue.
- vi. Pelage promises efficiency gains in the fast fashion industry.

14. Medical Applications

- Highly poisonous blood, but curative in very small doses.
- ii. Broad-spectrum antibiotic effects.
- iii. Organs offer promise against gout and other diseases of excess.
- iv. Euphoric pheromones.
- v. Hallucinogenic secretions.
- vi. Exceptionally aphrodisiac sebum.

15. Edible Creature

- i. Highly nutritious but foul tasting.
- ii. Deadly poison unless processed.
- iii. Bland like cardboard.
- iv. Tastes like chicken.
- Incredibly delicious juveniles, but grows more intelligent with age.
- vi. Continually grows nerveless edible protein appendages.

16. Food Creature

- i. Edible digestion byproducts.
- ii. Secretes highly nutritious mucus.
- iii. Energy-dense strange or humorous tubers or grains.
- iv. Produces odd fruit and flowers.
- v. Emits pungent milk analogue.
- vi. Delectable egg analogues.

17. Labor Creature

- Represents good white-collar labor replacement option.
- ii. Sedative pheromones make it suited to emotional labor.
- iii. Vocalizations would make it popular as a musical attraction.
- iv. Docile and strong, excellent for heavy labor.
- v. Small with fine motor skills, good for mechanical industrial labor.
- vi. Endurance and speed make it an excellent racing steed.

18. Exotic Pet

- Aggressive and prone to imprinting, makes a fine personal defence pet.
- ii. Superlative fur is lovely to stroke.
- iii. Friendly and nurturing demeanour, good with children.
- iv. Loyal and smart pack hunter.
- v. Intelligent and capable of some learning, could make a socially stunning second footman.
- vi. Strange and polymorphous, certain to elicit gasps of surprise.

19. Militarily Useful

- Dread aura incapacitates poorly trained opponents.
- ii. Extremely enduring steed.
- iii. Biological fortress.
- iv. Loyal symbiotic combat companion.
- v. Debilitating bioweapon potential.
- vi. Possible servile supersoldier with minor biomantic intervention.

20. Valuable Horror

- Fluffy exterior conceals murderous vorpal abilities.
- Reality degrader attenuates membrane between the world and the void, makes magic easier to activate (if not control)
- Infests dreams, eats away at memories. Psychoterapeutic options abound.
- iv. Perfect survivor with environmental hyper-adaptability.
- Bio-assimilator converts other creatures into itself when exposed to trigger radiation.
- vi. Exhibits super-human capabilities without any semblance of spirit. A vile biological machine created long ago as an alternate organic shell for a ka-ba duality?

THE VASTLANDS

How Wostijaz Used Star Hweh

Green, Fire, Water, Wind

According to some quarterling traditions this four-fold typology represents the living cellular structure of the cosmos. Green is the ordered drive of life, fire is the entropic cascade of energy, water is the brute material of the physical cosmos, and wind is the swirling chaos from the interaction of fire and water.

Given World

Many archaic quarterling cultures are convinced that the world is not a natural phenomenon, but an artificial gift bestowed on their ancestors by divine builders when time began.

Flickerstones, Ka Incarnate

Many cultures believe that divine builders initially made the Given World out of their own minds, embedding the fires of consciousness into the very fabric of the universe. They also say the Given World used to be much smaller, a globe-village threaded by sentience, every rock and tree and river part of a single connected noosphere.

Star Hweh beheld the Upper Waters and became a fish. Star Hweh beheld the Middle Winds and became a bird. Star Hweh beheld the Lower Green and became a beast. Star Hweh beheld the Under Fires and became *ka* incarnate, the spark of sentience geminate in the flickerstones of the Given World.

Wostijaz found the holms of the holy programmers small. It found the roles of worker and descendant and progenitor small. It found the precautions of the principates stifling. Wostijaz found the lying seed of ambition, the zygote of aristoi perversion, within its heart and hid it from the purification session comperes. Concealed it from its comrades, its antes and its posts. Nurtured it with malignant dreams and callous egotism. Wostijaz became the master of souls, the creator of new workers, while all along sick ambition metastasised within it. Finally, Wostijaz held the flickerstones. Those master objets that powered the life-making of our idealite fratrie.

Did Wostijaz then choose to be the greatest vivifex our holm had yet seen? Did Wostijaz choose to serve the higher good and bring the greater glory to our settlement line? Did Wostijaz choose to do its part for our thirteen-thousand year cycle of gentle life between the Under Fires and the Middle Winds?

No. Sick ambition bloomed within it. Closet aristoi it became. Our fate it sealed.



Careful as a mantis, Wostijaz prayed upon the flickerstones and preyed upon the divine ka it unfurled. Within Star Hweh's incarnation Wostijaz sought a greater planet, many worlds, and the paths within. Faster it prayed, more it preyed, vaster grew the paths, smaller grew our circle of sentience geminate.

Senseless waste grew between the conscious holms. Deserts of pure thoughtlessness divided the thought workers of the holy program. The *nihil* void that stands beyond the Upper Waters flooded the world and made it tenuous and wide. Vastlands of mindless, gormless *ha*-body bloomed into being and the spark of culture grew small and weak.

While our glory shrivelled and decayed, Wostijaz found triumph. It revealed the treble-hidden gateway and opened the doors of perception into the curling root tunnels of reality. The nihilation paused. Wostijaz stepped through and departed to become a traveller-god. Mutation, translation, and mad modification bloomed at the stitchwork between the Vastlands and the Lower Green and neozoa spawned, overwhelming the perfect ideas we had cultivated upon the Given World over millennia. Our thinking world project collapsed. Our settlement line failed.

—Moss-bearing Quarterling oral tradition

Vastlands

Many of these cultures also have myths of an archetypal figure like Wostijaz, a waste-maker whose ambition exploded the initial paradisiac idyll, scattering the thinking villages and filling the intervening world with mindless desert. To the ancient practitioners of 'melted mind' technologies these wild places represent vast and terrifying wastelands. Euphemisms and linguistic drift elided their name to vastlands.

Root Tunnels of Reality, Root Levels

Fanciful traditional quarterling terminology for the passages connecting the natural and artificial gates scattered around the cosmoplasm. Even today many quarterling-derived labor castes sing doggerel about reality system administrators manipulating the Given World through their access to the root levels. Surprisingly, these tales appear to be incredibly old, with confirmed variants recorded in the third and second archaeological stratums of the Bell Abacus Arcology (cf. Prof. Nihil Overlook, Ancient Cosmoplasmic Mythologies, 2nd ed., 240rd:372-375).

The World Is Flux

But it is not chaos.

Stasimorphic Heresy

In the seventh decade of the redirectoracy many engineer monks of the order of Santa Ruperta proclaimed a heretical doctrine that the quarterling myths are based on truth, that our world is not natural but rather created or built, and that the fluid nature of both the biotic and animic (spiritual) spheres of existence is a modified or artificial situation, maintained by some form of vast homeostatic apparatus underpinning our cosmos. The heresy was successfully eliminated in 84rd and most (67%) of the key proponents reeducated by a cogflower inquisition corps under the command of Puromente Ionatian.

Nevertheless, elements of stasimorphism have proven useful for explaining the queerly static and conservative natures of several gateaccessible bubble worlds. The heroes come from a world of swift, unceasing change. This is understood as the way and nature of things. There are so many layers of history that nobody can give a final accounting of when one civilization began and another ended. There are so many facets of space and place that one must simply shrug and accept that the Vastlands encompass both hunter gatherers and fantascientific would be god-wizards, and above, in the arc of glittering fast stars, there are still abmortal beings that might as well be gods to the short-lived humans trekking across the grasslands of the world. Climates change. Populations move. Jostle. Change. Adapt. Disappear.

But life goes on.

And where there is life, there is profit. There are niches. There is exploitation and growth and explosions and crashes. Mundane lives thrown into the grinding maw of opportunity and adventure.









Who is This Naturalist?

Perhaps there is an opportunity for a bit of humanity in this vast empty place.

Their Background [d20]

- Wealthy dilettante naturalist. i.
- ii. Retired expeditionary force colonel.
- iii. Injured veteran turned painter.
- Outcast academy heretic. iv.
- V. Commissariat documentary maker.
- vi. Avantguarde artist lumographer.
- vii. Disgraced doctor changing career.
- viii. Redland revolutionary botanist.
- ix. Ambitious newly-freed golem butler. Greenlander big game hunter.
- х. Failed Oranjist elf-touched trapper. xi.
- xii. Avid corpocratic birdwatcher.
- Mercenary military virologist.
- xiv. Radical quarterling evolutionist.
- Subversive catlord biomancer.
- xvi. Labor cartel prospector.
- xvii. Safranian institute musician.
- xviii. Bluelander post-human poacher.
- xix. Pharmacore scout zoologist.
- xx. Exiled graduate student wizard.

Their Hopes [d20]

- Name more creatures than rival. i.
- ii. Bring back prize specimen.
- Win anti-turing painting prize.
- Overturn the scientic paradigm.
- V. Film secret life of rare creature.
- Make aurographs of zoo-vampires.
- Discover cure for common ailment.
- Liberate poor with new food crop.
- Be accepted as a full sentient.
- Bring back prize trophy.
- Make fur coat for Venus in Orange. χi.
- Discover target for servitor uplift.
- Isolate purely defensive bioweapon.
- xiv. Evolve self into a higher form.
- Create a better pet.
- xvi. Find and license new labor units.
- xvii. Craft hit opera with natural sounds.
- xviii. Kill, sell, profit, invest, retire.
- xix. Find valuable new snake oil.
- xx. Complete convincing thesis.

Their Secret Weapon [d20]

- Friendly whispering daimon. i.
- ii. Quite safe vomish sensory implant.
- Portable magic painting set.
- Colourful enamelled golem servant.
- V. Mysterious zoology manuscript.
- Far-seeing crystallized skull.
- Empathic augmented burdenbeast.
- Ancient full-spectrum electric torch.
- Superlatively cool sun glasses.
- Unbearably comfy shoes.
- Semi-sentient brass & crystal pistol.
- Soothing neural lasso.
- Autonomous chemical synthesizer.
- xiv. High density electric notebook.
- Archaic glyphed combat chainsaw.
- xvi. Vermin-repelling jade bracelet.
- xvii. Synthetic memory implant.
- xviii. High frontier energy rifle.
- xix. Symbiotic environment suit.
- xx. Magic towel.

