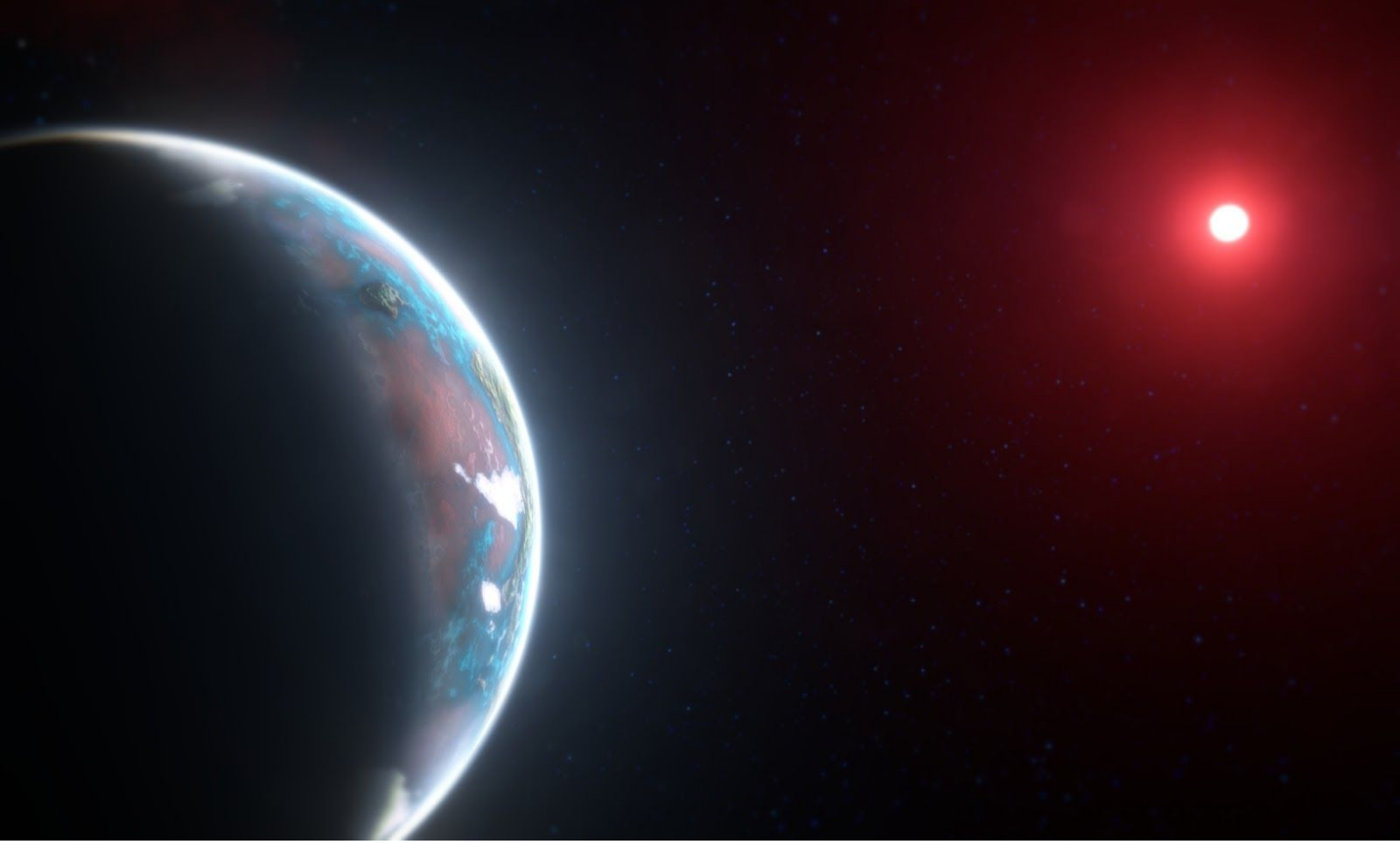

AURUTA 90DX
A SCI-FI WORLD SETTING
CREATED COLLABORATIVELY BY THE COMMUNITY OF RPREPOSITORY.COM

COPYRIGHT



FOREWORD

This planet setting document was created by the community of RPRepository.com over the course of a three week community brainstorming session. A short “world seed” was provided to kick us all off, and then we set to work together to flesh out the entire star system.

With this world-building project, we were aiming for a flavor of discovery and adventure as common cultural values. Auruta 9ODX is a place where most species are attempting to coexist, but tensions simmer beneath the surface as settlers’ different goals conflict… and perhaps some lingering resentments by settlers who thought their culture was the only one sending colony ships. Most, if not all, settler species will have only a few cities at this point, rather than sprawling nations. This is a very low to no magic setting.

Feel free to set role plays here, to homebrew your own rules and add on as you see fit.

TABLE OF CONTENTS

WELCOME TO AURUTA 9ODX

Appearing on most star charts as Auruta 9ODX, this tiny, glittering green world fascinated astronomers upon its discovery. It looked like a world rich in life and mineral wealth, and yet the readings always seemed… a little strange. Maybe a little dangerous.

Too far away from civilized worlds for typical modes of travel to be possible, the promise it held - for adventure, a new start, perhaps even great wealth - nonetheless attracted settlers. Everyone who went knew that their travel would be one way, and contact with their home world would not be re-established for many generations, if ever. In fact, for most it would take so long to get there that it would be entirely possible that their home civilizations would not exist by the time they got out of stasis.

What was *not* known to the settlers was that their home worlds weren't the only ones who sent a colony ship -- upon waking from stasis, landing and beginning to build their new townships and tiny nations, they began to discover that there were other newly-arrived species scattered across the planet who were doing the same thing! Some met one another right away; others managed to stay isolated for several generations...

It has now been 200 years since the first colony ships landed, and most of the various species have discovered one another as their budding new cultures adapt, grow and spread.

The planet has no native sapient life of its own, but is rich in native animal and vegetable species, as well as scientific anomalies that make life on Auruta 9ODX especially interesting and challenging.

THE STAR SYSTEM

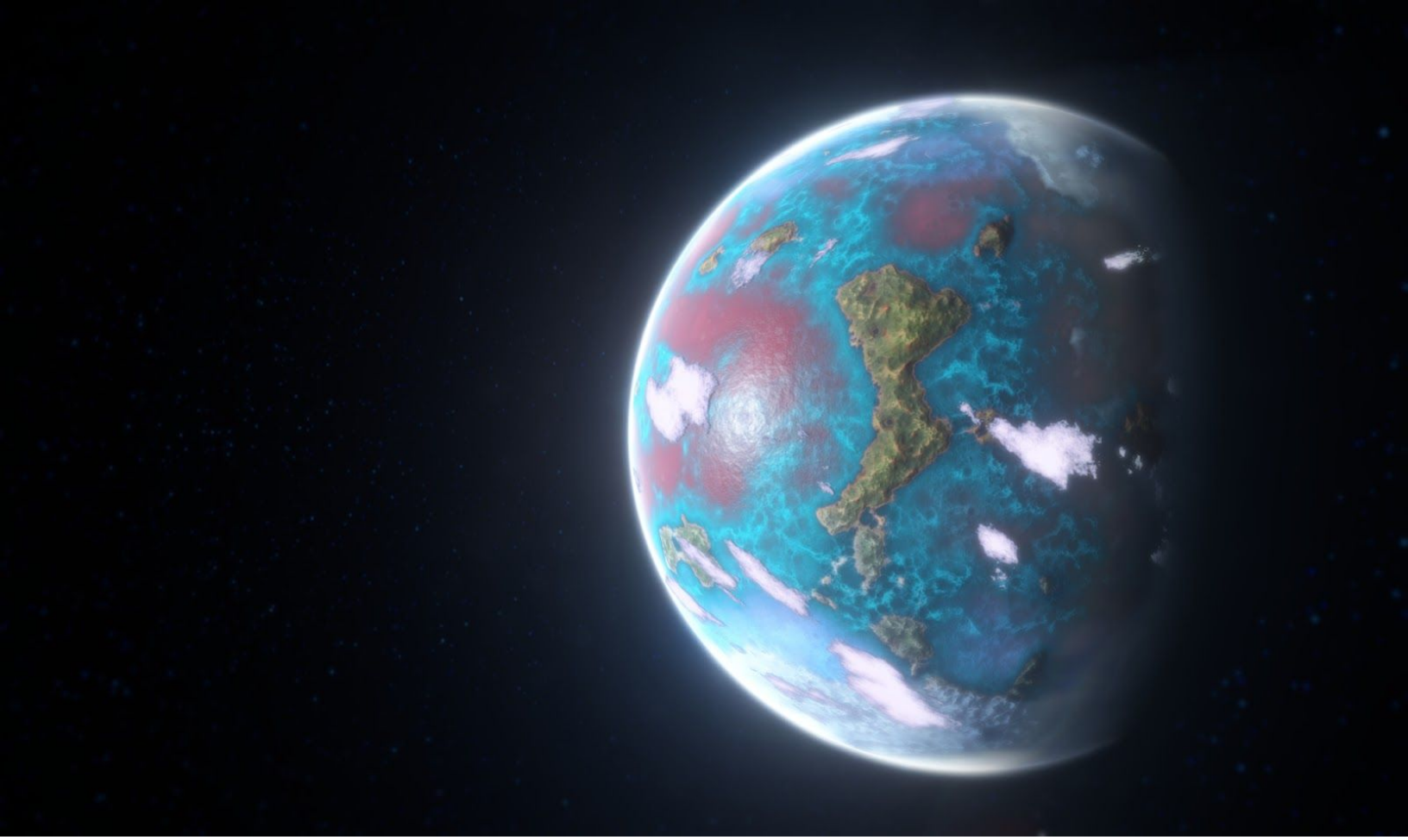
Aurut is a red dwarf star, with five small planets in its orbit. The first of these planets is Auruta 90DX. Auruta 90DX has no moon, though some of the other planets have tiny moons.

No planet in this system is larger than earth-sized, and there is no life on the other planets. There are no gas giants in the system -- indeed, only Auruta 90DX has an atmosphere at all. The other four planets are barren rocks and ice, as are their moons.

Beyond the planets, there is a dense asteroid belt of mainly pure water ice that frequently sends comets into the inner star system.

Though Auruta 90DX is the closest planet in its star system, the small size of Aurut means that Auruta 90DX is within the star's goldilocks zone. Being so close to Aurut means that the star in Auruta 90DX's sky often looks roughly the same size as our sun, but noticeably dimmer and reddish in tint.

DISTANCES AND OBJECTS NOT TO SCALE



THE PLANET

Auruta 90DX is smaller than Earth, and has only 75% of the surface gravity on Earth. If you weigh 100 pounds on Earth, you would weigh only 75 pounds on Auruta 90DX.

Since its formation, ice comets have bombarded Auruta, and occasional impacts still affect the planet. As a result, the planet's surface area is 90% water. However, due to the slow rotation of the planet, the oceans are largely unaffected by surface currents. Without a moon, lunar tidal forces are nonexistent.

Most of the planet's land masses are islands, with some larger exceptions. Even so, the largest land mass is less than 3 million square miles (slightly smaller than Australia.)

Most of the water on the dark side freezes during winter.

Orbit

Auruta has an eccentric elliptical orbit.

Auruta also has a high wobble factor in its own rotation, because it has been bombarded by comets a lot more than Earth ever was, and the bombardments continue, which prevents stabilization. It almost, but not quite, simulates being tidally locked -- one side of Auruta receives dramatically more light than the other throughout the year, creating a distinct dark and light side to the planet. During summer, daytime can last for weeks on the light side, while night similarly persists on the dark side.

The planet's slow rotation allows for some coriolis effect, which allows for enough dissipation of heat to prevent the permanent planet-wide storms that a full tidal lock would cause.

Close to 90% of the planet's compex flora and fauna, as well as most sensible colonists, inhabit the light side of the planet,. However, strange readings suggest there are rare resources and scientific discoveries awaiting those brave enough to explore the dark side...

Magnetosphere

Because of its proximity to the star, Auruta 90DX is subject to high radiation hitting its atmosphere. However, the planet core is dense molten nickel-cobalt, which creates a magnetosphere of sufficient strength to protect the planet from its star's cosmic bombardments and protect life, maintaining relatively earth-like levels of radiation at the planet's surface.

The interaction of the intense magnetosphere and the intense radiation from the star means that the planet has *stunning* auroras that extend from the poles nearly all the way to the equator.

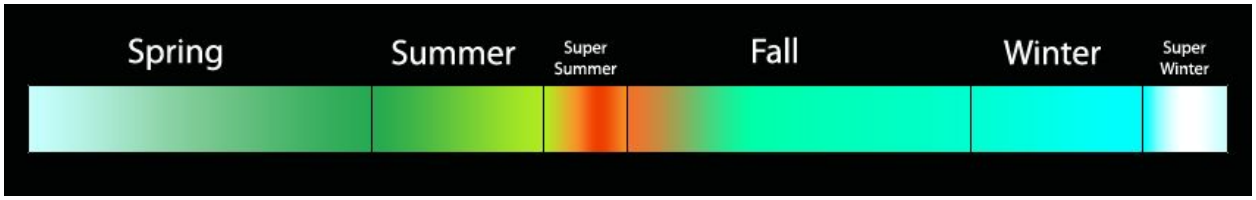
This strong magnetic field made the planet easily detectable by space-faring civilizations, which is one of several reasons why so many colonist species have arrived on it.

Flying creatures can use magnetic fields more effectively, allowing them unerring navigation capabilities.

Local magnetic fields on the ground are much greater than on Earth, which makes navigating with a compass VERY difficult; exploration can be challenging.

Seasons

With this orbit and rotation, Auruta has six seasons, which go from super cold to super hot. When the planet is tilted eccentrically away at the furthest extreme of its elliptical orbit, portions of the planet's sea freeze entirely. This creates a temporary landmass where some species gather to reproduce.



Visualization of average global temperatures on the predominantly light side of the planet during different seasons, and relative season duration

Some sea creatures can survive in frozen blocks of ice and simply wait out the cold seasons; many others simply migrate to other parts of the planet.

In some areas of the planet, there is enormous biodiversity as plants that are dormant in the super-summer thrive in the super-winter, meaning some landscapes look completely different during different parts of the year.

Most of the time, weather patterns are generally quite predictable because of the planet's slow rotation. There are periods of time where there is almost no "weather" at all. Everything seems to slow down even further as the planet moves away from the star, and winter approaches.

Algal Blooms

Despite the low gravity and the proximity to the star Aurut, Auruta 90DX manages to maintain its atmosphere due to the biological processes of algae. Known to settlers as Chokebloom, this ruddy-red ocean-based algae produces large quantities of carbon dioxide as part of its digestive process. This makes the sea seem to fizz where there are algal blooms; where Chokebloom thrives, the sea is literally carbonated.

Chokebloom lives in balance with Auruta's environment. Overpopulation of it would create global warming, but too little would create global ice ages.

When Auruta is closest to the star in its elliptical orbit, the planet heats up enough to be outside of the Chokebloom's preferred temperature, and the algae begins to die back. This slowly decreases the greenhouse gases in the atmosphere by rainfall effect, allowing the planet to begin cooling again even though its slow orbit has it still quite close to the star.

As the planet moves away from the star again, temperatures drop enough to allow the algae population to expand, creating a protective bubble around the planet and trapping heat within the greenhouse envelope, resulting in mild winters at the equator.

The presence of so much carbon dioxide in the water creates carbonic acid, and the seas of Auruta are naturally on the acidic side of the PH scale. Other biological processes keep a more neutral stratum of water near the surface, but much of the acidic water sinks down and remains in the deep ocean.

Infinite Energy Sources

The deepest parts of the oceans on the planet remain slightly acidic. The slow rotation of the planet means that this more acidic layer of the ocean is stable, and there are clear strata to the water.

The deep ocean is not so acidic that it is dangerous to life, but on a planetary scale, that amount of gently acidic water eating into the plentiful nickel deposits of Aurata creates an electric charge. This means that the planet itself functions as a natural battery, providing a near endless source of power for those that can delve deep enough to tap it. This is one property that made Auruta 90DX nearly irresistible to many colony ships.

Unique geode formations in the geological depths of the planet act as natural batteries, storing enormous electrical charges; occasionally deep caverns open into banks of such geodes, though stumbling upon such a thing unawares almost always proves lethal.

Current flows unchecked through the deep ocean; as a result of their adaptations, many deep sea creatures can survive lightning strikes. A common evolutionary coping strategy: Conductive scales that allow electrical current to pass through them without significant resistance. Many sea creatures, even in shallow areas, do not rely much on vision: instead, they use the magnetic fields of other creatures to navigate and hunt.

Camouflage from this sense for sea creatures includes: methods of discharging electrical energy more efficiently, or being magnetically neutral.

Natural Disasters

Here are some natural disasters a planet of this description might uniquely have, which GMs might enjoy throwing into their plots when they run games on Auruta 90DX!

Vicious thunderstorms

The fact that most of the surface is water creates a large amount of evaporation, especially with the weeks-long days that the planet experiences. Heat energy drives thunderstorms; in certain seasons Auruta is well supplied with such energy. Add in the battery-core, and the planet is prone to vicious and destructive thunderstorms.

Triple winter

When the planet is moving towards apogee and tilted away from the star in its rotation, sometimes the oceans freeze more thoroughly than usual. This means that the Chokebloom cannot function, which means lower greenhouse gases are expelled. What heat remains can more rapidly escape. When all three of these circumstances line up at once, it can result in EXTREME planet-wide winters. Native life forms have methods of coping with this once-in-a-generation event, but newly arrived settlers will not survive unless they prepare carefully...

"Nuclear" hurricanes

When the planet is close to periapsis, and tilted towards the star, the closest point of the planet to the star functions like a magnifying glass to create a hot spot where the ocean evaporates at such a rate as to make the air shimmer in clouds of steam. This has the dual effect of increasing the salinity of the ocean and (due to water displacement) creating currents that flow from all parts of the world. Because of the speed of this evaporation, a low pressure area is also created in the atmosphere at sea level. These effects create a natural disaster unique to planets of this type, a super-hurricane. Because of the slow rotation of the planet, the storm doesn't form into thunderheads like it would on Earth. Instead, it forms an almost perfect mushroom shape; thus, the name “nuclear” hurricane. This effect is more prominent in the super-summer.

High winds

Because there's so little land to create barriers, the surface winds can reach higher velocities than they can on Earth; winds can reach hundreds of miles an hour. The potency of these strong winds can uproot trees and even strip soil away from exposed land. Vessels caught in these storms can be battered for days or weeks and may only find shelter beneath the waves. Native flora and fauna adapt to these winds with a variety of strategies, seeking shelter, burrowing or having evolved increased resilience through thicker hides. Commonly, native Aurutan animals and plants incorporate metals into their skeletal systems and epidermis, or their life cycle coincides with calmer periods in Aurutan weather.

Sea-geysers

When a pocket of nickel is breached by salt water suddenly, the interaction creates a massive underwater electrical charge that the planet is unable to store. Much like lightning striking the ocean on Earth, the resulting massive explosion creates a monumental geyser of steam, which erupts to the surface without warning.

Timekeeping

As Auruta's days can last for weeks or months at a time, and vary in length in different locations around the world, most settlers use the Terran clock of 24 hours per "day" to govern their work and sleep cycles.

It takes Auruta 90DX 574 Terran days to complete an orbit of Aurut.

For purposes of galactic standardization, lifespans of settler races and animal species are listed in this document using a Terran year of 365 24-hour days.

SETTLERS

Many different space-faring races have come to Auruta 90DX for their own reasons. These are the main species; however, your conception of Auruta 90DX may contain others.

Bhombil

Basic description

The Bhombil are a mammalian species, about 3-4 feet in height and covered head to toe in fuzz that can be brown, black or a reddish color.

Their right hand has five fingers and a thumb, while the left has four fingers and a thumb (like a human hand).

At some point in their history, they were a flying race, but now all that remains of their wings is a leathery flap of skin that goes from their wrists to their knees. Although they can't fly, they can glide - and in the low gravity of Auruta, they can glide a considerable distance. As such, they are rarely injured if they fall from a high place while conscious. They also have surprising upper-body strength from vestigial wing-muscles.

The Bhombil have dark eyes, an elongated face like a snout, and highly mobile noses. They have vastly more muscles surrounding their noses than they do their eyes,

and as such, most of their facial expressions are performed with the nostrils rather than the eyes -- one might arch a nostril rather than arch an eyebrow.

Their natural eyesight is quite poor. However, their senses of hearing and smell are exceptional. Some Bhombil wear high-tech goggles to help them compensate for their poor vision.

The Bhombil thrive during Auruta's summer and suffer less than most other colonist races during the super summer. During winter, they bundle up so thoroughly that they look like little spheres made of sweaters and thermal padding.

Bhombil usually live to be 80-90 years old, but occasionally individuals have been known to reach up to 120.

Diet

The Bhombil are strict herbivores, with a strong preference toward fruits and berries - soft plants with a high sugar content. The Bhombil require a high sugar content in their diet to survive, and make a variety of candies and even sweet meads enjoyed by other colonist species.

Bhombil are happy to join the colonies of other species, but the reverse is rarely true; a diet that features something other than berries and sweets for every meal is hard to maintain in a Bhombil colony, and other species find this presents numerous health problems for them once the initial child-like thrill of it has worn off.

Agricultural specialists

Bhombil colonies are known for their skill with horticulture and botany, utilizing a variety of ancient techniques as well as the latest in modern tech on their farms. Bhombil colonies are checkered with orchards and plots of berry-bearing vines -- during the winter, force-field domes are activated around the farms to create on-demand greenhouses that keep their farms producing year-round.

The Bhombil brought a variety of fruit bearing trees and plants with them from their homeworld, but have happily adopted (and adapted) the native fruits of Auruta as well.

Culture

Bhombil parents don't pressure their children to become doctors or lawyers. No, the best thing Bhombil children can grow up to be is a botanist.

The Bhombil love fairs and gatherings that look like county fairs to Terran eyes. Field games, competitive food preparation, and the opportunity to touch interesting and cute animals are commonly featured at these fairs. Bhombil botanists also compete at them in annual competitions to create novel genetically engineered or hybridized fruits.

Bhombil delight in perfumes. Floral and fruity are some of their favorite scents. They also enjoy decorating themselves with metal jewelry. Young Bhombil will sometimes shave or dye their fur in eye-popping patterns.

Because of their diet of sweets, sugary-smelling perfumes, comically oversized goggles and winter sweaters - not to mention their squeaky voices - other species often stereotype them as jolly, silly, or even as "yokels." The Bhombil find this annoying, but tolerate these stereotypes -- being underestimated can be used to one's advantage, after all.

Bhombil names

Example names: Frong, Brim, Mup, Ball, Song, Mill, Tru, Hep, Nob, Blutt

Example familial names: Brillybrilly, Warrybore, Tintinromp, Sillopatumus, Fraunder

When a couple marries, the cultural norm is to combine their previous familial names into a new one. A union between a Brillybrilly and a Warrybore might yield the Brillybore family, the Brillyborebrilly family, or, if the individuals involved are not terribly creative, the Brillybrillywarrybore family. This leads to a gradual lengthening of familial names over time, until the sheer inconvenience posed by filling out forms prompts the next generation to shorten their familial names again. Choosing which parts of the name to drop can cause tensions with parents and grandparents.

How the Bhombil came to Auruta

The Bhombil home-world has long-since mastered weather control technology; centuries ago finishing a satellite network that allowed them to utterly master every gust, cloud and raindrop on the planet. Winter was eliminated, and the weather is always perfect for farming and enjoying a sunny day in a park with your family.

But not all Bhombil feel that this is a good thing. Freezing the planet in the midst of a favored season meant that many species went extinct and haven't been seen for centuries. Many ecosystems on the homeworld are kept going entirely through artificial interventions. This fragility leaves many Bhombil scientists nervous. How would life fare on the homeworld if one piece of this technological web failed, or, worst of all, if the weather control system failed?

Cultural nostalgia about the days before the endless, perfect summer grew over time. Populations who had never seen snow before were fascinated by reality holoprogramming where a few city blocks were plunged into winter, and contestants competed to "survive" in a "harsh snowfall" for huge prizes.

With the discovery of suspended animation technology, colony ships have been setting out to find new habitable worlds, loaded with several hundred families and a databank full of genetic information on species that once existed on the homeworld. Individuals and families sign on to these one-way expeditions to seek economic opportunity, a fresh start, scientific discovery, the pure adventure of seeing a planet that isn't utterly tamed, or even a sort of spiritual longing to restore the old species of the Bhombil homeworld to existence, even if it happens light years away from their point of origin.

One such colony ship made its one-way journey to Auruta, and the Bhombil who awoke from suspended animation on its surface have managed to build multiple thriving cities over the last century and a half.

Bhombil colonies are an unfortunate source of new invasive species, as their colony scientists grow and adapt the next creature in their genetic databases. Sometimes, they will dump their newly grown species quite far from their cities or even on other islands when they realize that the new critter is fascinating, but not compatible with cities…

Dyokē

Atercoronatus sapiens

Basic description

The Dyokē (“die-oak-ee”) are a small, sapient race of theropods that were originally native to a foliage-rich moon orbiting a gas giant. They average 3-4 feet in height, with very tall individuals reaching a towering five feet.

With a culture built around salvaging the remnants of whatever surrounds them, they’ve become known for their crudely-put-together, but strangely

Dyokē names

Example names: Ta'vi, Navee, Xivah, Fanev, Tollah, Batee, Fe’ah

Dyokē do not use familial names, using their profession or guild affiliation as a further naming identifier instead.

efficient machinery, and shameless “acquisition” of property belonging to other people. Indeed, the Dyokē hold that the shame should be with an individual who would prevent others from taking something unused, should that other really need it.

Biology and anatomy

Dyokē possess an eerie resemblance to non-avian, theropod dinosaurs present during the prehistory of the planet Earth, and a lot of the major bone structures are similar in shape. However, unlike those animals, the Dyokē possess a posture tilted somewhat upright, and a much more gracile build, along with a ball and socket joint present in the wrists, allowing for exceptional flexibility. The middle toe is located to the side of the foot, creating a tripod-like structure. This foot shape lessens the surface area touching the ground, but also increases pressure above it. The toes are lined with dense pads of tissue to prevent potential damage from the extra pressure. The altered joints in the front limbs facilitate a hunting style dependent on grasping prey, as well as minimizing the damage inflicted to the hunter in the process.

This gracile build, though energy efficient and streamlined, comes at the cost of bodily protection. Dyokē are reliant on stamina, speed, and agility in confrontations. Using their stiff tails for balance, they are capable of sharp, rapid turns, and can maintain a sprint for 10 minutes or more. Their rate of acceleration is impressive as well, which comes in handy when darting out

of the way of the animals they hunt, or in the case of those living in foreign colonies, darting out from under the feet of much larger denizens.

Their internal organs are tinted blue, due to the respiratory pigment haemocyan (instead of haemoglobin); a trait which is common to vertebrates on their moon of origin. Blue, green and yellow pigmentation on the outside of the body displays the health and age of the individual. The colors become more intense with age, and dull when the body is injured or sick. Before the species gained sapience, this served as the primary method of choosing potential mates. Now the colors are primarily used for individual identification. Markings follow a species-standard pattern, with subtle alterations and mutations.

Vestigial, fine, hair-like quills cover most of the body. Denser patches grow along the back of the neck and the front of the chest. The Dyokē groom themselves for aesthetic purposes, and some styles are associated more with certain social classes. The skin under the quills is smooth and tough; consisting of tiny interlocking scales, impossible to see with the naked eye. Their skin is slightly tougher than human skin, capable of sustaining minor blows without bruising.

Culture

The culture of the original colonists from the Dyokē homeworld has been mostly lost to time.

Dyokē are adaptable and happily absorb culture from other colonists they live with, and are usually found in the company of other races.

When in the company of other Dyokē, they tend to rely on the preferences of the group as a whole. Most individuals attempt to surround themselves with like-minded others and leave everyone else alone. When confronted with the possibility of social conflict, they will often leave town. Because of this, they have a reputation of having almost no part in civil affairs.

Clothing and architecture

Most Dyokē prefer more form-fitting accessories, all social classes adorn themselves by hanging shiny trinkets around the joints. Most Dyokē abodes are built by the residents that live within them, using an eclectic mix of materials.

Presence on Auruta 90DX

Dyokē have a large population of several thousand individuals scattered amongst many multi-race colonies, though their proclivity for theft tends to get them into trouble. Because of

this, they've gained an unfair reputation as 'street rats,' and are typically treated as such. They make expert tinkerers, and their superb mental capacity allows them to come up with on-the-fly solutions (though often ineffective in the long term.) They're also quite good at reverse engineering and typically seek jobs where this skill is prized. Scattered colonies are located sporadically around resource-rich areas and though they're typically small, those that focus around commerce often end up becoming prosperous trading centers. Individual Dyokē sell their hodgepodge creations as cheaper alternatives to their prettier or more effective competition.

Playing a Dyokē

When playing a Dyokē, there are few restrictions in terms of lifestyle and places of residence, as they're not picky in the slightest. Their thoughts come and go quickly and they have a tendency to get sidetracked, much to the annoyance of employers. Their inventive nature and keen senses makes them very good at observing their surroundings and assessing the situation quickly, along with coming up with fast solutions. Their small stature and light frame do pose quite a risk when dealing with any kind of face-to-face combat and they can be easily dispatched if cornered. Due to this, they're much better with ranged and hit-and-run tactics. In settlements with other races, they're usually disregarded and ignored due to their reputation as "street-rats," their acquisitive natures, disregard of ownership rules, and inability to stay on task, especially in controlled environments.

Kruk

Basic description

Kruk appear to be made of a tar-like substance that holds a loose form: in some places dry and brittle, forminga carapace; while wet and sludge-like elsewhere. In fact, a single Kruk is a colony of millions of genetically identical cells working in concert to create a macro-organism, similar to coral. Kruk cells are more advanced than coral polyps, as they can work together to create specialized organs, such as a brain and a basic nervous system.

Kruk names

Example names: Emna, Kesqu, Yull, Phor, Shel, Slotter, Eih, Oll, Enkul

Some theorists conjecture that the Kruk evolved on a rogue planet, one far away from any star, perhaps adrift in deep space. Their lack of dietary preferences and black tarry appearance indicate the need to absorb all available nutrients, heat, and light from their habitat.

Kruk have a generally humanoid shape, and stand between 5’2 and 5’6 on average. Their clawed hands have only 3 fingers, including the all-important thumb. Their faces have a beak, which can come in a variety of shapes and lengths. Additional limbs, eyes, or other features are not unheard of in Kruk individuals.

Kruk tend to be brittle and their limbs break easily, but as each of their cells can take on any role, they are also able to heal almost any injury that doesn’t kill them.

The average Kruk lifespan as an individual is 40 years, though this is very much a median average; some Kruk will choose to remain individuated for only 20 years, while others may reach 60.

Diet

Kruk are omnivores. They will eat nearly any organic material, including the garbage of other races.

Sludge

A healthy Kruk produces Kruk cells in excess of what they need to maintain their own body. Rather than growing larger, they typically slough away these extra cells, to the tune of a couple of gallons per year from each individual.

These additional cells do not re-organize into a separate individual. Instead, they become stand-alone material that any Kruk can manipulate with a few minutes of contact. The Kruk groom themselves and collect these excess cells to use as a sort of all-purpose material that they themselves simply refer to as “sludge.” If minimally fed, sludge remains pliant and

manipulable for many years; if starved, it hardens in a similar way to dead coral, creating a hard, almost ceramic material that cannot be reshaped.

Sludge is used heavily for scientific and construction purposes and sometimes even used to create works of art.

If a Kruk is gravely injured beyond its own natural healing ability, sludge provided by another Kruk can be absorbed by the injured individual in order to heal.

Reproduction

To establish a spawning pool, multiple Kruk lose their forms and individuality and merge to create a sludge-like pool of cells. None of the Kruk cells in a spawning pool are devoted to creating a brain or other organs; instead, they divide at a rapid rate, generating the raw material for many more individuals.

It is thought that it is the shallowness of the spawning pool itself that stimulates Kruk cells to cease trying to form a humanoid shape and take on roles within that form. Sensing that the depth of cells around them would not be enough to create an individual causes them to begin dividing at the rate needed for reproduction, as long as there is enough biomass to fuel this growth. When the Kruk need more Kruklings to swell their ranks, they carefully smooth out the spawning pools to keep them spread as thin as possible, and increase the amount they feed the pool.

Multiple Kruklings can emerge from a newly established spawning pool, and well-fed spawning pools can grow extremely large and disgorge dozens of Kruklings weekly.

While Kruklings spawn so numerously that adult Kruks often view them as expendable, the spawning pools themselves are protected, cared for, and continually fed.

When Kruklings first emerge, they are about six inches tall, with an amorphous body shape. Over the course of five months, they grow rapidly and develop limbs and their beak. Many will be eaten

Mutated spawning pools

The high-division rate of cells in spawning pools, combined with the background radiation on Auruta, can occasionally lead to mutations taking hold in spawning pools. Much like cancer, these mutated Kruk cells divide out of control, and the pool begins to spawn abnormal Kruklings. These abnormal Kruklings may be tragically deformed and lead painful lives of only a few days, but others are twisted into outright monsters, often violent toward their own kind.

Kruk are deeply afraid of this condition taking hold in their spawning pools, and when it occurs, they will seek to destroy the spawning pool before their settlement can be overrun with aggressive Kruklings.

by predators or lost to environmental hazards before they reach adulthood.

Kruk are very tolerant of temperature extremes and have been thriving on Auruta. A larger number of Kruklings survive to adulthood than do infant Zkirax, another colonist species on Auruta that takes a similarly cavalier outlook toward their young.

At the ends of their lives, Kruk often return to the spawning pool and submerge themselves, quickly losing their shape and becoming part of the expanding pool.

Culture

Kruk emerge from the spawning pool a blank slate -- despite containing cells that were once part of another individual, they do not retain memories or personality traits from their ancestors. They have a newly organized brain and nervous system. They begin developing their own personalities and opinions as soon as they emerge from the spawning pool.

Adult Kruk adopt Kruklings and take them on as apprentices, and gaining such a patron or protector vastly increases survival probability.

Kruk have a wide range of beliefs and moral compasses. They will readily accept the practices, beliefs and even religions of other species if they are raised among them. The average Kruk cooperates well with other Kruks, and is open to working or living with other species should the need arise.

Kruk settlements use a vast quantity of resources as they constantly seek to feed and expand their spawning pools, with ever-increasing numbers of Kruklings. This can lead to conflicts with other settlers. Some Kruk settlements address this problem by establishing trade agreements with their neighbors, often agreeing to act as the local waste management and take in the garbage of other species as a food source for themselves.

Given their healing abilities and how quickly and easily individuals can be replaced, Kruk technology is famous for cutting corners and lacking safety precautions. However, it turns out that if you are willing to do away with most safety concerns, you can make devastatingly effective weapons. This creates pressure on other settlements to find ways to co-exist with the Kruk, even when the Kruk strain shared resources.

The majority of Kruks will prefer to be employed as physical laborers in production industries such as mineral extraction, forestry, or farming, with only a few showing a knack for knowledge work. Due to their rarity, Engineers hold a prestigious position in Kruk society, and achieving this position earns respect and appreciation from other Kruks. Unfortunately, there are few enough

of them that much of Kruk technology has had to be borrowed, bartered for or stolen from other species.

More recently, there has been a cultural trend toward adding cybernetic modifications to their bodies. Usually, this technology is obtained from Terran or Selenoid settlements and then modified to be compatible with Kruk physiology. Only the most affluent Kruks can afford this kind of augmentation, and so cybernetic parts are flaunted as a sign of status.

How the Kruk came to be on Auruta

Kruks themselves are not spacefaring; it's believed that a few stowed away on a Selenoid ship.

Selenoids

Basic description

Selenoids are a nocturnal species, sleeping during the day and active at night.

Selenoids are humanoid in physique. Their skin has a natural metallic sheen, usually silvery -- reflecting light almost like the snow where they commonly establish their settlements. Various other shades are also possible, such as copper and gold. Birthmarks and beauty marks range in shape and size, though if a Selenoid has them they usually have many in a deep bronze or silver color, depending on the skin tone of the individual.

Selenoids have head and eyebrow hair, which usually

closely matches the color of their skin.

Their eyes have extremely large pupils and a bright colored ring around the edge. Their dark vision is exquisite. Bright lights (especially sunlight) can damage the eyes, permanently, with enough exposure. This makes venturing in bright daylight without precautions dangerous for them.

A Selenoid's lifespan is approximately 30 - 40 years.

Culture

They tend to lead fast-paced, adventurous lives. If the species had a motto, it would be “no regrets!” Most Selenoids can be depended upon to be willing to try nearly anything once. They love making discoveries and strive to make their mark on history.

Selenoid Names

Example first names: Alaion, Elisen, Alyndra, Onvyr, Saevel, Briathos, Mydaiel

Example familial names: Ivarain, Snowess, Arrierial, Glaci, Urry, Tuliphis

Given their nocturnal nature and aversion to bright lights, they prefer to inhabit the cooler, darker side of the planet. They've adapted over time to the cold, though early settlers struggled with the temperatures. Auruta-based Selenoids wear thickly padded thermal suits, sometimes trimmed with fur -- more for fashion than for practicality, as their technology allows for clothing materials that are warmer and lighter than actual animal pelts.

Selenoids of all genders prefer to wear long hair, and short styles are rare.

Selenoids are not prone to xenophobia, and will readily befriend and welcome other species that present no threat.

They were once the earliest arriving settler race, utterly alone when they established their first settlement. They struggled bitterly to establish themselves. Many perished in the first years, as the planet’s seasons and wildlife devastated their populations. Since then, they have made enormous strides in adapting to the climate and weather of Auruta 90DX. Their first settlement is now a well-established city of wonder, known as Glacier Step.

When other settlers began arriving, the Selenoids were quick to reach out to invite them to join their city, not wishing any others to go through the grief and terror that they did. Some took them up on the offer, and there are now many non-nocturnal species who inhabit Glacier Step. Thus, the city is always active, a bustling metropolis.

How the Selenoids came to be on Auruta

Wanderlust and a thirst for adventure drove the decision to send settlers. Auruta 90DX represented a bright new horizon, flush with resources and strange new phenomena. Many who fancied themselves destined to become famous explorers or city builders eagerly signed up to be the first settlers that ventured to the planet.

Terrans

Also sometimes referred to as “humans.” Terrans originally hail from a planet called Earth, though they have become an almost ubiquitous species throughout the galaxy in the centuries since they became adept spacefarers.

Terrans are adaptable and culturally flexible in the extreme; a single Terran individual is capable of acts of either great kindness and cruelty. They have a wide range of cultures and beliefs.

Multiple Terran-colonized planets sent colony ships to Auruta, including one where the Terran population had genetically manipulated themselves to be better adapted to low-gravity environments.

Udunotts and the Far Skies Cult

Basic description

Udunotts are a slow-moving and ponderous race from the Etwett system. They are long and low-slung, with rounded muzzles, floppy ears, and shaggy equine manes falling from their spines. Their legs are stout, allowing them to assume a bipedal or quadrupedal gait.

Udonott Names

Example names: Uwwo, Etteer, Unoot, Awwautt, Awwett, Utnoor, Oronodd

Udunotts are a congenial species, eager to trade culture and technology, but sedentary and hesitant to travel too far from their home system. It came as a shock to most Udonotts, therefore, when an Udunora stasis ship called the PILGRIM set off from their home planet for Auruta's distant skies just under a century ago.

Culture and Auruta

The PILGRIM was commissioned by a group known as Far Skies, which believes that their sacred calling is to find a singularity of bliss located somewhere in the universe. Deemed

religious fanatics by most Udunotts, Far Skies was a separatist group back on their homeworld. As such, the Udunotts present on Auruta represent an offshoot of Udunora culture dramatically different from the homeworld.

Auruta was chosen as their destination as a consequence of the unusual sensor returns from the planet. The Udunora Scientific Review passed them off as inconsequential--while they didn't doubt that the planet was habitable or of some interest, they did question the merits of sending a ship to such a remote planet. Far Skies raised money over several years to afford a Terran stasis ship and subsequently outfitted it for Udunora physiology. The journey took forty years.

Upon making planetfall, the Udunotts established a base camp on a large landmass, a few days' travel from New Aurora. They saw this as more of an expedition than a settlement, since their goal was to locate the singularity, they brought little in the way of entertainment or creature comforts. From their base camp (which they never named, but is known as Udwera, an Udunora word that means "a place where journeys start") they began to venture out in methodical search patterns, at first on land, then sea.

Of particular interest were the Four Triangles of Iverson--the Udunotts were quick to set up another camp on a nearby island and focused on studying the phenomenon.

Far Skies has now been on Auruta for three generations. Most of the arrivals on the stasis ship have died and their children have inherited the task of locating the singularity. But some younger Udunotts are beginning to question the religious fervor their parents displayed. Some have even broken entirely away from the cult to live in New Aurora or other non-Udunora settlements. They tend to not fit in well, due to underdeveloped social skills.

Zkirax

Basic description

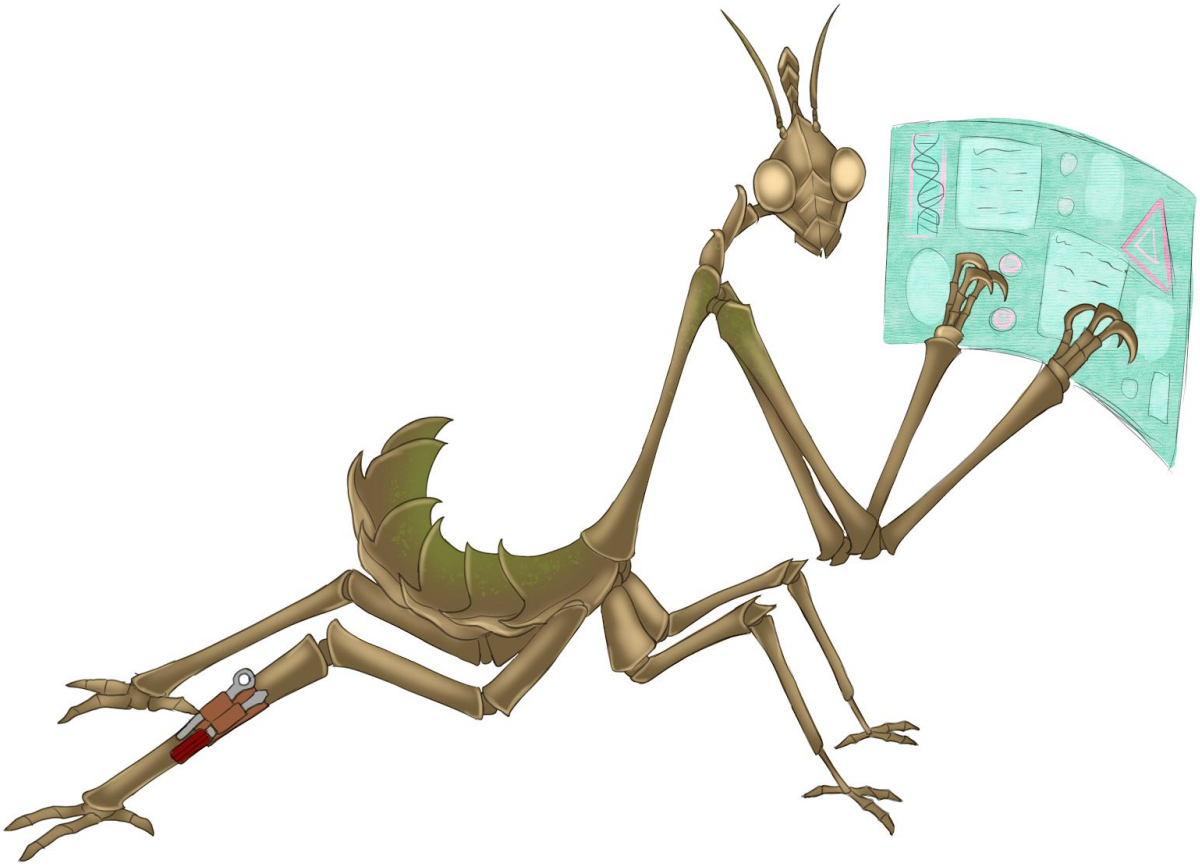
This insectoid race originally came from a world with low gravity, much like Auruta's. Their spindly bodies are elongated and covered in a hard, segmented carapace.

They have six legs, each of which ends in a tiny three-fingered "hand." Their two back legs are larger and stronger than the other four, and they use them to kick-off and jump long distances, taking advantage of the low gravity. The two front-most "legs" are longer than the others, and each of the fingers on the front arms are tipped with a long talon.

Pronunciation guide

Zkirax is pronounced "SKEER-ax," with the emphasis on the first syllable.

Their life cycle contains 3 highly distinct phases, with different social rules and behaviors; , they go from being feral, barely sentient little marauders to increasingly "cultured" and intellectual beings who are ever more devoid of hormonal drives.



They are masters of camouflage in natural environments, using mud, leaves, and other found items to blend in; they are capable of moving very stealthily. They can even stand still for hours if necessary until their prey (or an enemy) walks past, at which point they strike with lightning speed. They prefer sneak-attacks to direct confrontations.

The Zkirax like climbing, and much of their architecture involves elaborate latticework redolent with handholds both inside and out.

Their carapace makes them highly resistant to piercing or slashing, but their spindly bodies make them vulnerable to being crushed.

They prefer the more temperate zones on the light side of the planet, and that is where most of their colonies are found.

Most Zkirax do not make it to their teen years, but if they do, they live on average upwards of 70 years.

Adult Zkirax have an average height of 5’ to 6’2”.

Diet

They are carnivorous, preferring a diet of bird-meat above all other kinds, though anything with small and delicate bones also rates highly.

Cannibalism can happen during famine, and is considered an unfortunate but morally permissible necessity in times of starvation, especially when preying on their own nymph life stage. In adulthood, it is very rare that even starving Zkirax attack each other; they have a sense of self-sacrifice and one older individual in the group may well volunteer to lay down its life for the others.

Life cycle

Stage 1- nymphs in exile

Zkirax lay their eggs in special facilities built at the edge of the colony. Nymph Zkirax are able to see and walk moments after hatching, and within a few days, are able to begin using and honing their natural abilities to hunt flying prey, and camouflage themselves.

They understand the basic body language portion of the Zkirax language at hatching, and are ready for some basic schooling within a few weeks.

Nymphs do not have the hard carapace that adults do, and are physically weak and vulnerable.

Nevertheless, nymphs are independent and essentially feral, chafing at having to spend any time in proximity to other Zkirax and

Zkirax names

Example names: Klic’tot, Z’kissi, Icrie, D’gat, Cree’tissi, Gna’ott, Zet’ull, Lid, Krell

To prevent confusion about who is being referred to, most Zkirax names also include a gestural component.

As Zkirax have no connection to a biological family, they do not have familial names. However, many clasps will choose a name for themselves. These may describe their clasp specialization, special interests, or just sound like a team name.

Example clasp names: Architects, Deep Connection, Electric, High Thought, Luminoxium-rudi, New Aurora Traders, Sculptors, Wegener Hounds

Example full name: Z’kissi of the High Thought Clasp

sometimes becoming violent in their quest for personal space and independence.

Within a week of hatching, adult attendants outfit the nymphs with some basic supplies, and turn them out of the colony to care for themselves. The nymphs are eager to go. Crucially, among their first supplies is a unit that teaches the basic curriculum the Zkirax value in their colony-members; it gamifies the lessons and rewards nymphs for successfully completing lessons with treats designed to be irresistible to the young. The lessons grow progressively more advanced over time, and in the final stages, contain essentially randomized specializations. The curriculum units are networked and can detect their students through facial recognition, so even if a nymph were to obtain or share another nymph's unit, they would be graded and advanced individually.

The majority of Zkirax do not survive their first year outside the colony, and many more will be lost in the following years. Curriculum units that no longer have a pupil will be collected and re-used by the colony.

The nymphs are still young, small and unarmored, despite their brimming over-confidence. This is a wild and heady time in the life cycle of the Zkirax, when hormones drive them to make a wide assortment of bull-headed mistakes, and despite the curriculum units, a large amount of learning about the world around them is acquired through trial and error. On Auruta, temperature extremes take a heavy toll on Zkirax nymphs, and those that survive the weather are a favored source of food for Wegener Hound.

Around five years of age, Zkirax begin to grow their first carapace; their odds of survival past this point increase with every passing year.

Over time, nymphs begin to tolerate the company of their own kind again. During this period, usually from about 8-12 years old, they are quasi-colony members, living on the outskirts of the colony. The colony extends a certain amount of care and resources toward their upkeep. They are often a first line of defense for the colony should it be threatened, as they are still full of youthful hormones that make them quite willing to fight intruders and less fearful of death than anyone who is fully rationally thinking.

Stage 2 - Returning as young adults

From 18-22, Zkirax reach their adult form, and have left their rambunctious days behind. They feel ready to leave behind the thrills of adventure and near-death scrapes, exchanging this lifestyle for society, comforts and intellectual pursuits. At this point, they are now ready to return to the colony as full members. Usually, this is their colony of origin, though sometimes circumstances will dictate joining a new one.

During this stage, they are housed inside of the colony in co-ed dormitories, and the colony hosts a wide range of social events and advanced group classes in specialized skills. However, education is voluntary during this stage, and the emphasis is heavily on the social aspects of working together. Indeed, the jam-packed event schedule is really just social "mixers" of every kind -- the entire purpose of this stage is for individuals to identify others with whom they get along, communicate well, and share interests; in other words, your best friends for life.

It is also during these years that nearly the entire reproductive cycle of the Zkirax takes place. See "reproduction" and "cultural standards of beauty" below for more on that.

Stage 3 - Forming the "Clasp"

As Zkirax identify their favored social peers, they form "family" groups of 8 - 12 individuals, called a "clasp." Clasps can grow as large as 30 members, though this is rare. Clasps leave the dormitories and live together for the rest of their lives.

Individuals in a clasp are not usually blood-related, and a clasp is instead chosen family.

Trying to imagine a clasp?

For a human analog, imagine if a devoted hobby group that were all passionate about a specific topic and got along famously - let's say a tabletop group for this example - decided to pledge loyalty to one another, move in together, and behave as if they were all one family forevermore.

Once a clasp has been formed, most Zkirax choose to have limited contact with individuals outside of their own clasp; these are their favorite people, carefully chosen. This does not mean that clasps are hostile to one another, and indeed, they can and do work together on occasion. However, much like a human family can live in a house next door to a neighbor without ever spending social time with that neighbor, clasps often don't feel the need to socialize outside of themselves.

Clasps work and play together, and often, individuals within the clasp will have complementary skills to one another. This streamlined ability to work together means that many clasps also represent small businesses, research labs, ranches; any enterprise that requires a number of individuals to work together. They then trade their output with other clasps, or are cared for by the colony if they produce a "knowledge" product that can not be directly traded but contributes to the overall survival of the colony. Clasps lend themselves to specialization, and are the source of engineering or science breakthroughs.

Most Zkirax stay within their first clasp for their entire lives. Most clasps do not add additional members unless one of the original members has died, and adding a new member is a difficult

process, as all current members of the clasp will need to agree that the new member is a person with whom they wish to spend all their time for the rest of their lives.

Reproduction

Zkirax females only need to mate once in their lives. Afterward, each female can store the same genetic material to fertilize every clutch of eggs she will lay from then on. This means that picking her one-time mate is VERY important, and may even involve an interview process and trial tasks. Many colonies impose match-making on their returning youngsters. The mated pair may or may not bother to keep in touch after this "transaction" has been completed. An adult female can lay a clutch of up to 40 eggs every 3-5 years for the rest of her life.

Romantic relationships among the Zkirax are uncommon, and indeed, most members of the species do not recognize romantic love as a feeling they can have. The species has a large number of individuals who identify as asexual for most of their lives, especially after they have been an adult for a few years. When the concept is explained to them by other species, they generally identify themselves as "aromantic."

However, during the phase of life from 18-22, many individuals briefly find themselves intensely interested in courtship and courtship rituals.

Cultural standards of beauty

For most of the year, the Zkirax tend toward dull colors, but at the height of summer the males begin to turn shades of patterned violet and teal. During the super-summer, which gets hotter than they ever evolved to expect on their original planet, the males sometimes become so hyper-pigmented that they suffer mineral deficiencies as their bodies divert materials to their carapace. This color-changing continues throughout their adult lives, though it's largely vestigial once they have chosen a clasp and lost interest in courtship.

Although a bright and colorful carapace was part of their evolutionary mating practice, Auruta has created some strange cultural pressures; so much wild-life on Auruta is colorful, even phosphorescent, that the Auruta colonies of Zkirax have come to view bright coloring as being "animalistic," and associate dull colors with intellect and culture. This being a colony that depends on its scientists to keep it safe and thriving, intellectualism is now considered a highly desirable social trait. This has driven a hundred-year trend toward a modesty culture that has popularized drab-colored make-up. This started with just the males during summer, but now even females can be seen daubing on matte beige in an effort to look as refined as possible. This is done especially for social capital and respectability, not just being "attractive" in the sense of attracting a mate.

Day to day social structure

Clasps are considered the most important social structure and each individual is thought to have first loyalty to its clasp. A Zkirax colony may be made up of hundreds or even thousands of clasps.

Loyalty to the colony is a close second in importance. Different colonies can take on different cultural flavors and values over time, leading to some nationalistic effects.

Colonies also maintain guilds and trade organizations, where clasps or clasp members with similar interests can interact and coordinate projects together.

Language

In adulthood, the Zkirax place a high premium on effective and deeply meaningful communication. They have a large vocabulary devoted to describing feelings and the processing thereof. Lying to other members of your clasp is seen as a deep shame not for the liar, but for those being lied to, as it is culturally assumed that the clasp members must not be being supportive enough to be viewed as safe to be honest with.

The Zkirax language can be spoken with only vocalizations, but to give full meaning and context, it is properly combined with body posture and antennae position. For specially emotional conversations, antennae touching may be involved. Humanoid translators find they need to employ "prosthetic" additional legs and antennae in order to give their words full richness. It is hard for "out of context" misunderstandings to happen when all the elements are being properly utilized. For this reason,

Ideas for adventuring Zkirax

Some clasps choose to specialize in adventuring/exploring together, and so maintain only extremely loose association to any colony at all.

An adult Zkirax that has lost most or all of its clasp, or that has been evicted from its colony, will occasionally attempt to form a makeshift clasp with colonists of other species. This is one way that adult Zkirax end up in mixed species adventuring groups. Despite being deadly in a fight, they may often gravitate to a caretaking/protective role for the other group members.

Occasionally, a clasp may decide to specialize in import/export, and one clasp member may become the designated trader that interacts with not just other clasps, but entirely different species and cultures.

the Zkirax dislike audio-only communications and can find conversing with other species frustrating and fraught with misunderstandings.

Religion and philosophy

Much like romance appears to the Zkirax to be a confusing and unnecessary annoyance, the Zkirax just don't seem to need or want gods. They never developed any, and generally maintain respectful silence when the concept is explained to them by other colonists. Attempts to convert them are met with polite brush-offs, subject changes, or direct questions about how one can maintain a close relationship with a Clasp-Member who can never be directly seen, or, worse, never antennae-touched?

Instead, much of Zkirax philosophy, art and culture is based on the elevation of groups of friends. The highest purpose in life is thought to be emotionally and mentally supporting and elevating the other members of your clasp, as well as providing physical support for basic needs, so that together your clasp can reach its full potential.

The Zkirax tend to hold very practical and utilitarian beliefs about resource usage and decision-making. But once basic survival needs have been met, individuals are encouraged to work on artistic or research projects -- particularly well-off clasps may involve every individual to collaborate on a single artistic pursuit from time to time. Slow-moving dances, sculpture and elaborate metal engravings are popular pursuits, and such pieces may be used to represent their clasp to other clasps.

Many Zkiraks do not view life as inherently valuable on its own, but of extreme importance in relation to the clasp.

The Zkirax's life cycle causes them to devalue children, mainly placing the value of life with adults. This view often extends to callousness and neglect toward the children of other races, who find this attitude extremely alarming. Rumors about Zkirax eating children take root in other cultures, fueling biases and conflict.

How the Zkirax came to be on Auruta

The Zkirax homeworld long ago built a colony ship, filled with basic supplies, curriculum units, and hundreds of thousands of eggs held in stasis - there were no hatched Zkirax on this ship at all. All maintenance was to be undertaken with robots and ship AI. This ship still travels from star system to star system, depositing eggs, supplies and curriculum units on planets within certain parameters that make survival a possibility. The ship then immediately moves on

without waiting to see how the hatched nymphs fare. Again, the Zkirax do not begin to value life until that life has survived to adulthood and becomes capable of showing full personhood. The homeworld designers felt that even if only some of these colonies survived, they would still have accomplished their goal of assuring the long-term survival of their species.

There are two Zkirax colonies currently present on Auruta. The first contains about 5000 adult individuals. The second contains only 1200 adult individuals. They prefer larger landmasses for their colonies as opposed to small islands, given the drive for nymphs to roam away from colonies.

Although they have the blueprints for spacecraft in the databases left with them, as yet the Auruta-based Zkirax have not seen fit to invest the resources in a space program.

FLORA & FAUNA

Argenic Daisies

These cold-loving flowers are defined by the unique silver color of the petals and the green glow they seem to give off during particularly bright days in the winter seasons. They appear quite small, no taller than 15 centimeters above the surface -- but below the surface, they have astoundingly deep roots, sometimes digging more than 100 feet into the soil.

They can most commonly be found growing along the edges of freshwater lakes and ponds during the winter and superwinter seasons, especially if that body of water has not immediately frozen solid.

The petals are coated in a highly reflective silvery material, which makes the petals a popular jewelry item when properly preserved and treated. The petals are highly mobile, able to twist and bend over the course of a day. The flowers use the reflective surface of the petals to direct sunlight to the green bulb located in the center of the flower. The light being directed in this manner causes it to pass through the bulb and emerge stained green. The central bulbs contain a number of seed pods, and are shot through with highly concentrated chlorophyll.

Argenic Daisies' lifespan begins in the early winter months, as the temperature begins to drop precipitously. When they get cold enough, the seed bulbs open up with a sudden crack, spraying the surrounding area with seeds. Roots sprout from the seeds and begin to rapidly dig downward, sometimes pushing through solid ice, seeking out warmth underground - no matter how deep they need to search. Once found, the roots bring nutrients, water, and even heat up to the main body, which then rapidly begins to develop its petals, bulb and silvery coating.

By the middle of winter, the petals are fully developed and the signature green glow is present during brighter days. Sometimes the snow or ice around the plant is partially melted given the way it concentrates sunlight and how efficiently the roots transport heat.

Once super winter arrives, the petals fold inward and encase the bulb to protect it from the harsh weather. The plant shrinks throughout super winter until it is an average of just 7 cm tall. This state of the plant's life also creates something that is a popular piece of jewelry when properly preserved and treated.

Only a small fraction of these plants survive this phase of their lives, with most either being eaten by sunwings or destroyed by the storms. The few that do survive contain enough seeds to replace the depleted population.

Argenic Daisies do not tolerate competition from other plants very well, and when the weather begins to warm and the ground softens, the roots slowly pull the plant underground, where it goes dormant until the colder weather encourages it to re-emerge and drop the seed pod that it grew the year before.

Though the flowers tolerate cold very well, they are sensitive to small imbalances in the pH in the soil. The flowers are particularly sensitive to the presence of sulfur which can inhibit the proper formation of the petal coating, resulting in the seed bulb dying out.

Farming is possible for these plants, although this is a niche practice as their main usefulness to settlers is in jewelry production.

Auruta Flytraps

Scientific name: Ministaro Monstero
Common names: Mini monsters, Slug flowers, Auruta Flytraps

Auruta Flytraps look similar to a Venus flytrap, with little black eyes on flexible stalks. The “bloom” sits atop a long, slug-like body, which mimics the appearance of a flower’s stem. The largest ones recorded can be up to a foot long, but most never grow larger than 6 inches. They are a dark green in color, which fades to a maroon toward the head. Some varieties have “ruffs” of feathery petals which aid them in mimicking an open flower. They are common in rainforests and jungles on the light side of the planet.

They are able to move slowly, but spend hours sitting completely still with their mouths wide open to allow insects or even small birds to wander inside. When they sense prey has landed in their mouth, it snaps shut and the teeth interlock. The mouth remains closed for up to a month as the prey dissolves and is digested.

Auruta Flytraps purr, click, hiss, and make a variety of sounds, though these can be muffled during a month when the mouth is locked and digesting.

They can be trained to understand some basic commands, and are often considered good, low maintenance pets.

Aurutan Oak

Like many species on Auruta 90DX, the Aurutan Oak is brightly colored, both in bark, leaf and fruit, with a kaleidoscope of leaves reflecting the high metal content that the oak shares with other species on the planet.

The wood is famously strong and difficult to carve, but the deep brown lustre of a well-crafted table is a highly prized item on Auruta. Its roots spread widely and deeply, and in winter the precious sap is pulled deep underground to prevent the tree from permanently freezing.

In summer, the leaves reflect much of the excess heat, which helps to regulate the tree's temperature and also gives the tree the moniker "the traveler's rest," as the deep shade under its branches is notably cool.

These trees are exceptionally long-lived, with life spans of a thousand years or more possible, given optimum growing conditions.

Chamaemorpha

INVASIVE SPECIES

Chamaemorpha are roughly the size of an adult lion, reaching a height of five and a half feet at the shoulder. They are aggressive and ravenous predators, eating everything from insects to large animals.

Chamaemorpha lay eggs in clutches underground and, much like a cicada, have broods that come out once every 7-12 years. This means that adult Chamaemorpha are not always present on Auruta, and eradicating them is difficult - one must find the hidden clutches underground, waiting like time-bombs.

In the wild, Chamaemorpha hatch, grow, feed ravenously, lay their eggs, and die again over the course of a year. Chamaemorpha are not cold-blooded, but still strongly prefer warm climates.

In captivity, a Chamaemorpha's life cycle can be carefully managed and prolonged, essentially denying them the chance to lay their eggs. This can cause them to live for many years. And some in the galaxy do keep them in captivity -- Chamaemorpha have a basic intelligence and are trainable, and can be made to serve as terrifying guard-lizards for their masters. Someone clearly thought they would be a useful early protection against hostile wildlife and

resource-starved neighbors and brought some with them to Auruta. Most settlers blame the Udonotts, though the Udonotts flatly deny that they would be so foolish.

Whoever was originally responsible, Chamaemorpha clearly escaped captivity and have begun to spread with gusto. Their life-cycle allows them to side-step most of the seasonal hardships that Auruta presents to other invasive species, and the rich plant and animal life during the spring and summer provide Chamaemorpha with an ample food source. Sunwing populations are devastated during years when wild Chamaemorpha hatch, with concerning effects on native ecosystems.

Chokebloom

Scientific name: Aestasphyta
Common names: Chokebloom, Gaspcloud, "The Fizz"

There are many different varieties of this alga. The most common variety is red in color, but green and greeny-blue variants also exist. The vast majority of aestasphyta species are edible and provide a wide range of nutrients, including protein. However, the flavor is unfortunately bland, and when cooked, if not carefully processed, Chokebloom has a rubbery or gel-like texture.

Some colonists call it "The Fizz" because of the way the sea bubbles when this algae grows in high concentrations. Others call it Chokebloom or Gaspcloud because of the highly efficient way it converts oxygen to carbon dioxide, making it difficult for most colonizing species to breathe around it.

Small amounts are used in scientific labs where a low oxygen content is required as CO2 displaces oxygen present in an atmosphere. It has even been considered as a natural fire suppressant additive to water.

Cik Flowers

INVASIVE PLANT

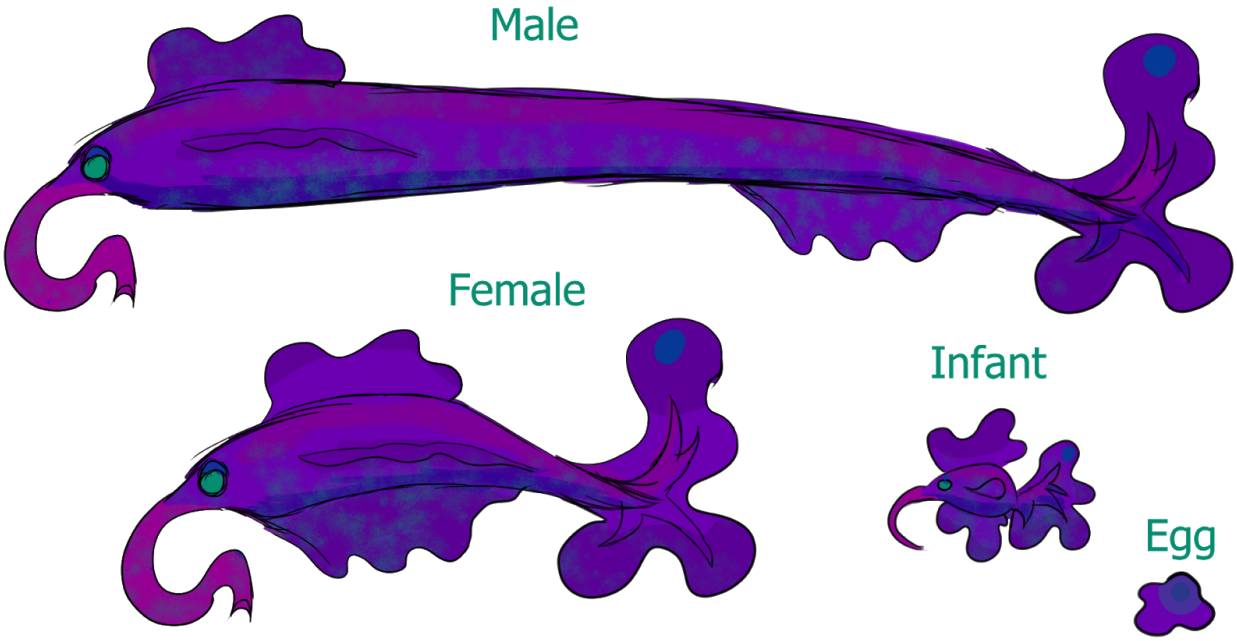
Kruk sludge mingled with native plant life has created a mutant variant of vine that grows with extreme rapidity, taking over areas and choking out other plant-life, like kudzu. These vines grow lavish flowers that look similar to dark green roses.

The flowers themselves are edible, and when cooked they have a moderately spicy flavor and a high protein content.

Elephant Fish

Scientific name: Ichthys Elaphas
Common names: Elephant Fish, Cattle of the Sea

Like the name implies, this fish has a long snout. Elephant Fish are also quite large - or at least long - and can grow up to 12ft in length.



But unlike its namesake, the Elephant Fish is a predator, eating smaller fish. Their purple hue closely matches that of the forests of kelp-like plants that they live in, and their long, slender bodies are flexible enough to coil and mimic the shape of the kelp. Elephant Fish snare hapless prey that venture too close with their flexible snouts.

Some settlers also refer to this fish species as the Cattle of the Sea, as it is plentiful, easy to catch, and tastes pretty good -- especially when grilled with proper seasoning.

La Forêt Blanche

The island of l'Île de Beautou is roughly circular, and only about 18 miles across. However, 3 square miles of this island are covered in dense, bare, bone-white “trees” called La Forêt Blanche.

It appears that this forest is a single organism. Similar to the way that mushrooms are simply the fruiting body of an underground fungal patch, the root system of La Forêt Blanche is one continuous network, with the individual trees simply being the above-ground “limbs” of this creature.

People and animals that wander into the wood find themselves ensnared by fast-moving “branches,” that work together to hold and suffocate their victim. The body is then absorbed into the trunks of the trees and dissolved for nutrients.

La Forêt Blanche was only discovered 10 years ago, and thus far, is the only example known of this species.

Linistrok

Anatomy

Tall and slim, Linistrok reach an average of 7 feet high. They have four long, muscular legs, and a slightly shorter torso with four arms and a large head. Their skull and legs bones are exceptionally strong.

Linistrok have four fingers on each hand and each finger has a short sharp metallic nail. However, they appear to be completely docile - there is no recorded case of any settler being harmed by a Linistrok. Linistrok use their nails to peel fruit and pry open nuts for consumption. Their diet is entirely herbivorous.

Linistrok heads are unsettlingly simple, with no nose or ears. Linistrok eyes are extremely large, giving them excellent night vision, but the eyes can be shielded with a transparent membrane to allow them to see almost equally as well during the day.

They use their mouths exclusively to eat; they do not appear to have vocal cords.

Some Linistrok also grow a tail, which some scientists theorize can sense vibrations in the air and acts as a simple ear -- if so, it is probably only capable of picking up vibrations to tell the creature when something is approaching, rather than allowing for detailed hearing of words or other information.

They often sleep in the tops of trees, but also occasionally in caves or other sheltered areas.

Sexual dimorphism

It is easy to identify male and female Linistrok at a glance.

Females have additional pairs of eyes that ring their heads, allowing them a 360 -degree range of vision.

Males have cape-like “wings” nearly as tall as they are. The wings are extremely light and somewhat flexible, but are useless for flight. The wings have filaments of metal that grow throughout their translucent flesh, which shimmer beautifully in the sunlight. Males spin, dance and pose during mating season, making their wings flash and shimmer for potential mates. With each passing year that a male Linistrok survives, the more metal will appear in his wings, making him shine brighter. Predators are often attracted to these bright displays and males may also use their wings to fend off their attackers with rapid distracting swipes and flutters..

Locomotion

Linistrok walk slowly most of the time, plodding from tree to tree. When threatened, however, they jump. With the planet’s low gravity, their extremely light build, and their four muscular legs, they can jump several hundred meters at a time. Males sometimes use their wings for stability as they return to the ground. It’s thought that while they are in the air, they look for likely sources of food and safety. They seem quite good at remembering locations, and in choosing their landing spots.

Linistrok use a great deal of calories in these explosive jumps, and will generally perform no more than two jumps in a row. But five jumps in a row was once recorded for a strong female Linistrok.

Communication

Linistrok have been observed performing simple, repetitive dances for one another, and it is believed that this is how they communicate information to one another such as potential dangers, good sources of food, and safe places to rest.

Lifecycle

The average Linistrok lives for about 6 years. Linistrok are oviparous. They generally mate during early spring or early fall, and the females lay several eggs. Newly hatched Linistrok only take a few months to mature to adulthood.

During mating season, Linistrok females commonly consume rocks and clay in order to support the mineral needs for their thick-shelled eggs.

Linistrok eggs have a metallic appearance, and are extremely hard and difficult to crack. The embryo absorbs metals from the shell itself, and once the shell has been weakened enough through this absorption process, the young Linistrok can break out.

During super summer and super winter, Linistrok dig themselves underground and hibernate.

They live as individuals.

Plumgren

A native grain that turns a striking purple when ready to harvest. Most of the colonies have begun domesticating and cultivating it, as it is hardy enough to grow from spring through fall, with only a brief die-back during super summer. When milled, the flour is pale purple and has a naturally sweet, toasted flavor.

Shellmeats

A native salt-water shellfish, similar to an oyster. Their shells range from pale grey-blue to a bright cyan, and the creature inside is a pale blue. They eat by filtering microorganisms out of water, and are thought to purify water of parasites. They are extremely high in salt and fat, and are a popular deep-fried treat among settlers.

Silver Shoot

This pale green, partially translucent plant has a silvery liquid that runs through it in large veins. It can grow up to 12” tall, and is extremely hardy, able to go dormant to wait out extremely adverse environmental conditions.

The plant is safe to touch when intact, however, when the plant is broken, the ichor is an irritant and eyes should be flushed immediately to prevent permanent blindness. If the ichor is not washed away by rains and instead left to rot and dry, it becomes highly toxic to both animals and plants. At no time should the ichor be ingested, it is almost universally poisonous.

Its strange appearance and low upkeep requirements makes it a popular house plant. It requires direct sunlight, but only needs watering 3 - 4 times a month.

The ichor can be processed into a number of steroid-like drugs that speed up growth and

Did you know...

The Kruk sometimes experiment with off-label uses for Silver Shoot compounds, seeking ways to increase their production rate of sludge. These experiments can be dangerous.

healing. Silver Shoot compounds are used for healing broken bones and damaged tissues alike. These drugs are carefully controlled and regulated in most settlements, as it is easy to overdose on them and cause cancerous overgrowths.

Sky Leviathan

Scientific Name: Serpenti Tedeum

At first, Auruta's Sky Leviathans and Sea Worms were classified as two entirely different species -- though it seemed likely that they were distantly related. But long-term observation of their life cycles made it clear that they were in fact different life stages of the same creature.

These creatures have long, ropey bodies, covered in bony segments similar to an insect's exoskeleton. The body is composed of several dozen long segments that allow the body to freely bend. Each segment (save for the head and tail segments) has four long wing-like appendages - used as fins in the water, and for gliding in the air - and feather-like bristles, used for sensing electric and magnetic disturbances. The head is eyeless, topped with two large antennae, and split wide by a large mouth with no teeth or tongue.

Young Sky Leviathans begin at 12 feet long, and though it's believed they can fly as well as adults, they rarely leave the ocean. They swim tirelessly, straining water through their massive mouths and out of their gills, constantly filtering micro-organisms from the water. Their only purpose is to eat and grow, and grow they do. The largest specimens have been measured at 3

kilometers in length, with a segment thickness of about 100 meters. Due to their size, they have few natural predators even at an early age, and none as adults.

They use their wing-like fins to leap from the ocean and glide for long distances. The young ones have been observed playing with different areas of gaseous content, using the carbonated water in patches of Chokebloom to accelerate to high speeds (carbonated water is less dense than normal water, which means less resistance, so they can travel through it very rapidly), and then flinging themselves into the open air to glide.

Over time, they absorb CO2 from the water, and the swelling can't be expelled fast enough. This expands the digestive system to the point where it is no longer effective anymore, turning them into neutrally buoyant tubes. Once they reach this phase, they will no longer eat anything, and spend the rest of their lives in the air, mostly in the upper atmosphere of the planet. Only rarely do they come down to take in big mouthfuls of water, or to give live birth. They will gradually become thinner and weaker as their bodies consume themselves for energy, and over the course of months or years, they die. During this time, they seek out mates, traveling long distances to deposit their young in far-off seas. Sky Leviathans are hermaphroditic, and after mating, both parents will bear young.

Despite their territory being in the upper sky, they are easily visible overhead. They will often be found in small groups. While the sky is not typically crowded with them, it is uncommon to go more than a few days without spotting one.

Sky Leviathans rely exclusively on electromagnetic waves to navigate through the sky. Their antennae are needed for reliable navigation and their innate senses allow them to avoid storms and electromagnetic disturbances.

In spite of their tremendous size, Sky Leviathans are docile. There are only two times a Sky Leviathan can pose a serious risk -- The first is when they are descending for water. A thirsty Sky Leviathan's open maw scooping up water as it skims the surface can also ingest anything small enough that happens to be in the way. The second risk occurs when a Sky Leviathan dies, and the massive corpse falls from the sky. Due to Auruta 90DX being a pelagic world, most Sky Leviathans die above open water and fall into the sea below.

Similar to how terrestrial whale corpses can create a miniature ecosystem, Sky Leviathan corpses will draw in many different types of creatures during their decomposition. The segmented exoskeletons are not as thick and tough as they appear and can often be hollowed out.

Space Goo

Scientific name: Offere Spatium

Covering the icy sheets of the night side of Auruta 90DX is a teal jelly-like substance that can coat significantly large areas. While adhesive to itself, it is not terribly sticky; it often feels more like slime or paste. Due to the harshness of the night side, and its apparent inert nature, it has not been significantly studied yet.

What is known is that it is a clonal colony of microorganisms, similar to bacteria in many ways. Somehow, it seems able to survive without any sunlight at all. Researchers have been baffled that it seems to only need the icy water to survive the extreme conditions.

Because of these low survival conditions, Space Goo is actually quite abundant on the night side. It serves as the bottom of the food chain for many creatures that eke out a living in the darkness.

Stone Lord

Scientific Name: Magna Fodiens.

Stone Lords are semi-bipedal creatures with a thick sloth-like body, save for the two additional appendages below their arms. They are covered and thick and coarse fur with lots of body fat. They have scent receptors on their snout. On each of their six appendages, the ‘feet’ have long sharp claws that help them dig through the ground. They possess no eyes, but instead have four receptors on the top of their head that detect infrared, allowing them to ‘see’ heat. Within their mouths are razor sharp teeth.

Stone Lords are most commonly found on the dark side of the planet. Due to the infrequent opportunity to hunt, they are normally slow moving, and prone to periods of deep hibernation to conserve energy.

Stone Lords are massive, being at least 30 feet from head to rear. Their sheer size makes them an apex predator, and because of this they are a serious threat. Thankfully, their hides are not as thick as they seem; any modern weapon technology should fell one with relative ease, given concentrated attacks.

Stone Lords' true threat comes from their ambush abilities. Their long claws are capable of digging through just about any surface. They can move lightning fast in short bursts, and can

erupt from underground to snare prey unawares. They're not picky with what they eat, but prefer larger prey.

Prolific diggers, there are cave systems all over the night side of the planet from the passage of Stone Lords. Once the Stone Lord has moved on, the remaining caves are used as homes for smaller fauna to shelter in, and as such Stone Lords are greatly beneficial to the ecosystem. Just watch your step.

Sunwing

The lingering radiant sunwing is a relatively large insect species no smaller than 12 cm and no larger than 38 cm. Their bodies are covered in an exoskeleton that varies in color depending on the environment they live in. Their thin bodies also have large wings on their backs that refract light like a prism, and two pairs of antennae on their heads. During the daytime, sunwings will often be seen sunbathing with their wings spread wide to catch as much sunlight as possible. When not sunbathing they will be gathering up smaller insects with their limbs to bring back to their nests. The nests consist of clumps of materials common to the region they are found in (i.e. leaves in forests, grass and dirt in fields, etc.)

Uses for Sunwing wings

The wings of the Sunwing can be used as a convenient torch in a pinch -- just glue several pairs of wings to a handle, and make sure you leave your sunwing torch in direct sunlight during the day, and you will have a source of light comparable to a flame torch for several hours. If you have time and resources, laminate the wings to prevent the shedding of scales can make your Sunwing torch last for years.

Some settlers on Auruta, especially Terrans and Bhombil, have also been known to press their wings between glass to use as decoration during festivals and holidays, or even as jewelry.

At night, Sunwings take flight and exchange food and other materials with one another or search for mates. Their wings slowly shed small dusty material which glows in the dark for hours. This material will glow more brightly and vibrantly the longer the sunwing was in the sun. They will attempt to impress mates by "drawing" patterns in the air with the trails of light left behind by their wings. The lingering dust will slowly disperse throughout the night, leaving the surroundings glowing gently by the end of the night as the dust tends to cling to other materials.

They have a high protein, vitamin, and sugar content in their bodies which makes them not only a tasty snack but also one that can be quite healthy in moderation.

Females have rounded wings that are larger and glow more brightly but with less variance, usually only yellow or white.

Males have smaller, more jagged looking wings and come in more vibrant colors. Males' wings will glow with green, blue, red, and very rarely purple.

Sunwings are a foundational part of many ecosystems on Auruta. Many plants depend on them as seed spreaders, and many animal food chains have Sunwings at their base.

Tallet Spiders

There are hundreds of variants of Tallet Spiders, in a range of sizes and colors to match their environment. Like many types of life on Auruta, some of these varieties incorporate highly reflective metallic sheens.

They have eight legs and eight eyes. Many varieties are covered in spiky hair that breaks off and lodges itself like a splinter should they be touched. They do not spin webs like some of their terran namesakes, acting instead as ambush predators. They eat the flesh of insects and small animals; with their strong mandibles, they can break through an insect's carapace, and do not need to externally digest their food to consume it the way that Earth spiders do.

Most varieties of Tallet Spider avoid larger life forms, though they may well be found hiding underneath the furniture in settlements.

Male Tallet Spiders create arrangements of pebbles, scraps, feathers, shells, and any other small decorative object they are able to lift to create displays for females during the spring mating season. They are known to relieve settlers of smaller items.

Some of the larger varieties have nominal intelligence and possibly even a limited range of recognizable emotions, and can be tamed and kept much like a pet tarantula.

Walking Shadow

Scientific name: Equimola

A short-stemmed plant, tipped with petals and seeds. At the base of the stem, four long, broad red leaves cover the ground. The stem itself is covered in tiny, fur-like needles.

Walking Shadow is very toxic, and their presence in soil means that the ground will quickly become poisoned to most plants other than the Walking Shadow itself. Animals that eat it will become violently ill, and those that brush up against it risk the tiny needles on the stem injecting a direct, potentially fatal, dose of poison.

Walking Shadow can move. They almost exclusively do this in darkness, however. During the weeks-long days of summer, they seem as stationary as any other plant. When the darkness finally arrives, their roots gently pull themselves up from the soil and spread out over the surface, crawling underneath their leafy skirts. Walking Shadows strongly prefer direct sunlight, and do not like to be shaded. During their mobile phase, they often drag themselves to nearby fauna, poisoning it and consuming the rotting vegetation. In this way, Walking Shadows are responsible for large clearings in forests, where they aggressively clear areas of direct sunlight for themselves.

Large populations of Sunwing insects seem to mollify Walking Shadows' desire for unrestricted sunlight, slowing the Shadows' spread at night.

Waxy Wasp

Waxy Wasps are solitary flying insects. They eat and lay their eggs in rotting fruit. They can sting many times when threatened.

Waxy Wasps will produce hundreds of waxy cocoons throughout their life times; each time they sense a strong storm coming, they cocoon themselves in a natural water-proof wax pod to ride out the wet weather. They will partially consume the cocoons when they are done with them, but inevitably cast-off cocoon bits are left behind.

Wegener Hound

Scientific name: Deinocanis ("Horrible Dog")

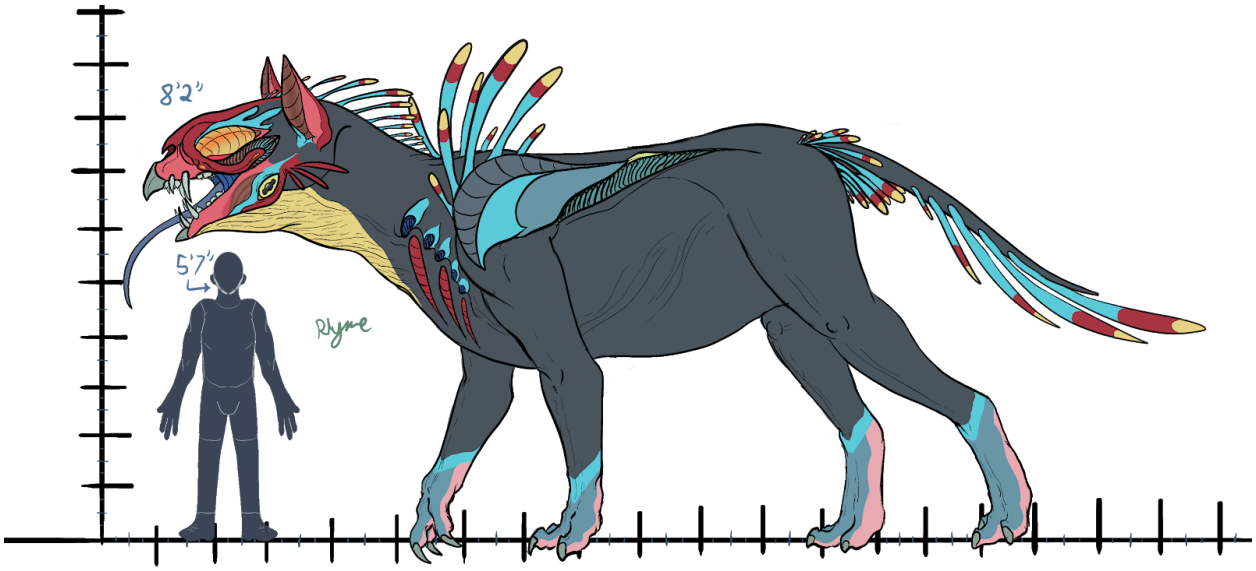
The Wegener hound, named for the location where it was initially discovered, is a large, colorful animal. Sporting tusks, an incomplete beak, sharpened canines, and flat incisors, it is incredibly opportunistic in its diet. Although technically omnivorous - the beak can be used both for shearing off tough plant matter, and piercing into tough hides - they prefer animal protein above all other food sources.

The structures that are present throughout their bodies are fairly complex; an example are the bulbous sacs located under the blue crown of the cranium, and behind the nostril opening.

These are used both as resonator chambers to amplify sounds produced in the vocal cords, and to analyze particles brought into the nostrils as scent, thus further enhancing their sense of smell.

Large ears sit on the rear of the skull, and their bat-like appearance amplifies the input brought in from the outside world. The seemingly leaf-shaped, joined limbs on the edges of the top jaw are used only to aid in intimidation, and communication among members of a group. When in use, they flare outwards, displaying the bright blue and brown surface that makes their faces look much bigger.

Coming from heavily armored ancestors, traces of their heritage remain in the carapaces that line their shoulders and run down their back. “Vents” in the carapace allow for airflow that keeps the animal cool, especially when it is exerting energy to hunt.



Wegener Hounds have feather-like sensory organs that line the back of the neck, the jawline, shoulder blades, and tail. They function like whiskers, with the ones lining the jaw being the most sensitive.

Sexual dimorphism

Females average an immense 8 feet and 2 inches tall, and are the stronger of the two sexes. Their “feathers” are tipped in yellow.

Male Wegener Hounds average a height of 6 feet, and their feathers are tipped in red.

Hierarchy

These hounds live in extended family groups, which are called 'prides,' and are matriarchal. The massive sizes of the females cement their positions in the pride, and when disagreements emerge, they violently establish dominance. Nearly all individuals in a pride, except the most feeble and young, participate in hunts. Designated nurses will watch the young, and forage for plant matter to supplement their meat-filled diet.

Hunting

When tracking large prey, they rely on strength and numbers to overwhelm their quarry; but this consumes energy quickly, and as such, if the initial tactics fail, they will be too exhausted to continue. Smaller prides may be forced to use stealth tactics, but this seems to be rare. Very rarely, lone individuals will utilize prolonged pursuit, driving an animal over long distances until it eventually succumbs.

Danger

Due to their size and strength, Wegener Hounds pose quite a threat to both lone individuals and small groups alike. Even so, they are usually unwilling to attack settler races -- they have quickly learned that the risk is not worth the reward.

Lone Wegener Hounds are the biggest danger to settlers, as they are opportunistic out of necessity, and will defend themselves from a perceived threat. Unlike being targeted by a pride, these loners may stalk their quarry for hours if desperate enough, waiting for them to make a mistake. When facing an individual head-on, especially if you are shorter than them, the best option is to aim for the eyes and hope you can disable it before it strikes.

Thankfully, due to their sleep cycles, encounters during the day are incredibly rare, and prides usually go out of their way to avoid any settlers.

Intellect

With an intellect similar to corvids, they are capable of basic problem-solving, understanding and experiencing empathy, and have the ability to remember faces in great detail. This aids them in interactions among both members of their own pride, and outsiders, which can be vital when assessing hierarchy and authority within the pride, which prevents possible fatal insurgences.

Wegener hounds make a variety of facial expressions, and there is some evidence that when they live around settler races, they can come to understand and mimic some of the facial expressions of settlers as well. They clearly understand tones of voice and emotional reactions.

Curious prides have been known to snoop around settlements at night. The misunderstanding of interactions on the parts of the hounds during these explorations can pose a great danger to settlers, and due to this, prides surrounding areas with a greater population density are typically culled to prevent mishaps.

KEY LOCATIONS

Glacier Step

Quite probably the first colony ever established by settlers on Auruta 90DX, Glacier Step is a Selenoid city built on the dark side of the planet. The city is buried beneath the permafrost, with towers and transparent domes protruding from the frozen landscape.

It is possible to live in Glacier Step for years without ever being exposed to out-of-colony air. The streets are tunnels, public parks are viewing domes where you can watch Auruta's breathtaking auroras shimmer and ripple in the months-long night. Everything is heavily insulated, and heat of all kinds - that produced by equipment, farming, even body heat, is carefully managed and distributed throughout the colony as needed. Most indoor areas are only softly lit, as Selenoid eyes are quite sensitive.

The city is renowned for its beauty, amenities, and round-the-clock activity. It has become a sprawling underground metropolis - so large that its outlying areas might be considered their own townships - criss-crossed with subway pods that can carry groups of 10 at a time from district to district.

When other settlers began arriving on the planet, the Selenoids were quick to invite them to join their city. Some became permanent residents, while others stayed for only a few seasons until they had a greater understanding of Auruta's unforgiving climate and were ready to strike out on their own. Aside from creating a diverse community of residents, this early policy has also left Selenoids, and more specifically Glacier Step, with strong, positive diplomatic ties to many other settlements that now enable its existence through favorable trade agreements.

Trade and export

The city's population has long-since outgrown the colony's ability to feed so many mouths, and Glacier Step is a major importer of agricultural goods from settlements on the light side of the planet. The Bhombil are one of their main trading partners in this regard.

Although Glacier Step lags behind many other settlements in the creation of physical exports, the Selenoids have a knack for generating culture. Music, holo-novels, and even fashion from Glacier Step are in high demand around the world.

Glacier Step also capitalizes on its historical significance, and a constant flow of tourists stream through the city.

Demographics

- Population: 2 million
- 67% Selenoid
- 23% Terran
- 5% Bhombil
- 3% Dyokē
- 1% Other

Government

Selenoids do not find administration interesting, but they do value the boring aspects of life being kept running smoothly. Therefore, much of the day-to-day management of Glacier Step is handled via AI.

The policies those AIs follow can be changed by majority vote -- policy elections are held every three years, with any policy tweak that gains enough signatures eligible to be placed on the ballot. However, most policy changes are suggested by the AIs themselves as they analyze efficiencies, coming resource shortages, and other potential needs and goals of the colony.

Colony representatives (usually Selenoid or Terran) are also elected for terms of three years, who handle Glacier Step's trade agreements and other foreign affairs. Non-Selenoid residents have been lobbying for longer terms of office, saying that this would allow for more stability, while the Selenoids themselves view requiring more than three years of service from one person to be an unfairly long time and strongly resist changes to term lengths.

New Aurora

Named after a Terran city of the same name, New Aurora is one of the oldest settlements on Auruta 90DX. Established shortly after the first Terran colony ships came to settle the planet, New Aurora was founded as a penal outpost, a home for outsiders, vagabonds, and assorted ne'er-do-wells where they found common cause in their differences. Now, the settlement is a sizable city in the heartland of the planet, and its citizens pride themselves on their openness and acceptance of others.

Demographics

New Aurora is mostly made up of humans; however, any alien race is invited to take up residence there. As of the last census, the population of New Aurora is approximately 1.5 million people, consisting of 53% humans, and 47% of other various alien races.

Mellserina

A unique profession that has developed on Auruta 90DX, a mellserina is a merchant who works with native waxes. Because of the watery climate, housing can get damp and moldy; therefore, reinforced inner housing materials, solidified with such wax, are often used as part of the insulation, especially by settlers who can't afford higher tech-solutions.

Mellserinas gather wax from native insects, and fortify it with plant additives. They can be hired to insulate an entire house, but are also seen on the streets of New Aurora hawking candles, cosmetics, and other wax-based goods.

Government

New Aurora uses a system of direct democracy, where any citizen can stand for office and vote in elections. The Auroran government consists of the First Speaker, who heads the Cabinet, which consists of representatives from each of New Aurora's districts. They make public policy and establish city-wide laws. At the district-level, citizens in a district vote for their representatives on the Cabinet, as well as in a district-wide governing body called the Assembly, which makes district-wide policy. The Assemblies have wide latitude in their rulings, however, no Assembly ruling can conflict with a Cabinet ruling.

Geography

New Aurora sits at the fork of the Neumann River, an important waterway that runs through the center of Auruta's main continent. The Neumann River runs through the Wegener Mountains, then splits (and then rejoins) at New Aurora, leaving the heart of the city on an island in the river. Bridges connect the island to the mainland, where many residential districts and shops exist. Much of the government work is done on the island, called Madigan Island, which is named after the first First Speaker of New Aurora, Richard Madigan.

Arc tower

New Aurora is protected from Auruta's frequent lightning storms by an enormous arc tower, situated at the eastern edge of the city. It is too large to fit on Madison island; the tower has massive tree-like vanes branching for miles in every direction. It harvests energy from the

clouds while channeling lightning strikes away from the city. This structure is iconic, and shows up in New Aurora artwork, logos, shirts, and tourist paraphernalia of every kind.

Velk's Canyon

Nestled secretively between the twin peaks of Mount Siloe and Roget's Peak, Velk's Canyon lies at the base of a deep ravine, hollowed out through centuries of erosion. Its high walls help to protect the settlement from Auruta's vicious winds, and its shadowed depths are shielded from the star's light and radiation. The Kruk who first settled there named the settlement after their leader, Velk, whose inspirational words started the exodus from Glacier Step.

The city is constructed from many layers of hardened sludge, tiered domes and curved ridges on a grand scale. The ceramics of each dome are interwoven with support structures and natural materials such as stone to add greater strength and sometimes cosmetic appeal. Velk's Canyon is noted for the dozens of spawning pools from which the Kruklings spring, and elder Kruk often take their final pilgrimage to Velk's Canyon to return to the greater whole. The Kruk are not the only species to reside in the canyon, however, they are the largest proportion of settlers. An aliens' quarter has been established higher on the ridgeline, overlooking the city, where more light and heat can reach.

Velk's Canyon is riddled with cave networks caused by water infiltration which dissolves limestone and which has been aided by Kruk miners. These dark, damp passages are ideal for growing algae and fungi to feed the population and spawning pools. The food requirements are met with an ever-expanding mining and farming industry, such that the city's Kruk are self-sustaining. Alien residents find this diet unappetizing, and require daily shipments from other settlements.

Governance and law

For domestic matters, the Kruk have a guild system. Each guild is a cross between a political party and a government bureau, both advocating for policy and administering it. Guild membership is voluntary; not all Kruks will join a guild. Aliens living in Velk's Canyon are not invited to become involved in civic affairs.

Guild Sludge

This guild has a Kruk-first ideology, often pushing for more resources to be devoted to the care and protection of the spawning pools, Kruklings, and research into further uses of sludge and how to increase the amount of sludge each individual produces per year.

Guild Witkin

Witkin attracts the knowledge-class of Kruk society, pushing for greater resources to be devoted to research, technology, and education of citizens.

Guild Perciv

Perciv tends to attract more adventurous-minded Kruks, and takes the greatest interest in trade, foreign affairs, and anything that is going on outside of the settlement.

Perciv maintains a council that makes final decisions on foreign affairs and diplomacy. The council is made up of two generals, two engineers, two diplomats, two merchants, and two non-specialist Kruk who are meant to represent average civilian Kruks.

Military

The Kruk are keenly aware of how frequently their quick expansion and demand for resources rubs other colonists the wrong way. Therefore, military forces based at Velk's Canyon are formidable, as the Kruk have established a defensive force with the aid of other aliens' technology. This, combined with their natural fortifications, means that any aggression against the Kruk would be a nigh insurmountable challenge.

Velk's Canyon maintains a militia. The average Kruk combatant is underequipped, though armed with knives and blasters, with little armor; they rely on their numbers to overwhelm opponents. In addition to these soldiers, Velk's Canyon has a force of half a dozen "Council Guards," who are outfitted with premium weapons, clad in armor so advanced that a Council Guard must take a sacred oath to their settlement before the armor is grafted to their frame. Council guards are the most dangerous Kruks, and a single Council Guard can be as dangerous as many more Kruk soldiers.

Ironically, the Kruk rely on the technology of other species to create their Council Guard armor, and trade for the components in secret.

Trade and Export

With the large mining industry, ore, stone and natural fuels provide ready exports for the Kruk. In fact, an exceptionally rare marble laced with Luminoxium-seni called lumimarble has been found in the walls of Velk's Canyon, and thus far, no other source for this stone has been discovered on Auruta. Guild Perciv enforces a strict cap on the quantity of lumimarble that can be extracted each year - much lower than demand - which keeps the price of lumimarble high.

Lumimarble is used in the palaces of rulers and the mansions of the wealthy, where footsteps on the marble dance floor literally glow underfoot.

Shortly after the discovery of lumimarble, Velk's Canyon made a gift of a lumimarble floor for the Glacier Step capitol building to the Selenoid; a thank you from the Kruk who had been allowed to shelter with the Selenoid in their earliest years on Auruta 90DX.

Pik-pik-lacorum

Roughly translated from Bhombil as "the first fruiting," Pik-pik-lacorum, usually known only as Pik, was founded using the skeleton and skin of the initial colony ship in which the Bhombil arrived. The framing, spread outwards and upwards, formed the early habitat and green houses the Bhombil needed to survive. Later came more permanent fabricated structures, rounded with a great many windows, balconies and terraces.

Today, that initial settlement forms the historic heartland of Pik, but the city itself spreads far further -- over 350 square miles, with about five hundred thousand Bhombil living in Pik. However, the population is concentrated to the south and west of the city.

Despite its age, the fusion reactor which brought the settlers safely to Auruta still beats strongly in its casing, sending almost unlimited power throughout Pik-pik-lacorum.

To the east, vast leveled fields and orchards feed the Bhombil with the sweetest and most flavorful fruits, nuts and berries developed in the agricultural laboratories dotted throughout Pik. Automated farming machinery meets the endless demand for sustenance, and factories based deep underground turn the excess into preserves, candies, and sugary liquors.

The southern district of Pik butts up against a small mountain range and the most wealthy and politically important Bhombil make residences and palaces high up, overlooking the sprawling city beneath them.

The western portion of the city borders the great ocean, which provides water for drinking and farming when de-salinated, and a great source of entertainment in the form of water sports and luxury undersea exploration. Lower income housing is thick around the docks.

To the northeast, several low structures are the only indication of a shuttle launch facility, for in-atmosphere transport. There is also a launch facility for industrial satellites, which is kept in regular operation.

Each area is linked with gold and bronze monorail structures, and gleams in the reflected light from a million panes of glass. However, it is sparsely used, as most Bhombil families of any means boast a hover vehicle.

Traffic jams are a relatively common occurrence, as, despite the rigorous demarcation of flight paths, Bhombil in their precious hover vehicles tend to roam where they like. Accidents are not uncommon.

Inside the city structures, the Bhombil lead lives of peaceful agriculture, and indulge in raucous parties and somber bureaucracy.

Zoos and genetic research

The northern district holds a fantastic metal and glass structure which contains the archeo-zoo, more than a mile and a half in height. Inside, Bhombil scientists grow, blend and rediscover creatures that have been lost to all but the fossil record, from Auruta and beyond. They take a special research interest in the genealogical archives brought from their home world.

Beyond the bronze and granite walls of the city lies an untamed jungle, filled with the carelessly released creatures from the zoo's overflow, experiments gone wrong, and the terrible hubris of over-eager and inexperienced Bhombil bioengineers.

Trade and export

Pik-pik-lacorum is the bread basket of Auruta 90DX. Hundreds of tons of plumgren, fruits, nuts, and vegetables are shipped out of Pik every day of the growing season, along with processed or prepared foods. When natural disasters halt production from Bhombil farms, it isn't just the Bhombil who go hungry.

Pik's western district has developed a lively fishing industry, almost all of which is exported; Bhombil themselves have little interest in seafood.

Bhombil import raw materials to help satisfy the demands of their science and industry. In no small amount, some of those imported raw materials leave Pik again in the form of consumer electronics.

Government

The Bhombil homeworld is run by a world-wide benevolent bureaucracy, headed by a Chief Administrator who is elected by the population every ten years.

Pik-pik-lacorum has attempted to mimic this system, but the much more rugged environment and the existence of resource shortages has led to the introduction of corruption, officials openly accepting bribes, and many citizens ignoring the rules imposed by their bureaucracy. This has led to some wild over-corrections and experiments in new forms of government.

Politics is a favorite topic of discussion in Bhombil gatherings, with nearly everyone having a boisterous opinion on how things ought to be done. Sudden changes in leadership, or a district declaring it is now its own sovereign government and attempting to secede from their neighbors, only to discover that self-governance is hard and returning a few weeks later, are not unheard of.

Defense

Pik's walls incorporate advanced ground, air and space defensive facilities, automated and ever-vigilant against threats against the center of Bhombil civilization on Auruta. The city has never been attacked by other settlers, but occasionally, some creatures created by the Bhombil seek to return to their creators. A web of detection drones and capture-mines prevent the worst creatures from scaling the walls, and the Bhombil are very kind, preferring catch-and-release methods of defense over lethal ones whenever possible; even to those monsters that they have discarded.

TBCLUCGSOPARKMISSMSCTAS Arcology Project

The foundations of a mega-project have been laid in the form of an arcology, and already two miles of jutting filament of shining nickel-alloy rise above the city and cast thin shadows, even over the lower palaces to the south. The arcology is five miles in diameter. The lowest levels of the arcology are covered in domes, containing lush, green foliage, an experiment in self-regulating atmosphere, for a fully sealed and protected habitat. Unfortunately, further building on the arcology has been paused, as the Bhombil have realized that they don't have the technical expertise to construct it so large and still be self-sufficient. They hope that they will make breakthroughs that allow further development in the near future, and have called on all of the other settlers of Auruta for help with materials and research.

In an effort to raise additional funds for construction, they have sold the name of it to half a dozen corporations or other entities, and the arcology now bears the unfortunate name of the “Terran Banking Corp/Lattice Up Clasp/Glacier Step’s OPAR/Kruk Mining Industries/Smith’s Salvage/Material Science Clasp/Trifilibambillybore Architectural Studios” Arcology Project.

The Bhombil optimistically project that upon completion, more than eight million families will be able to take up residence inside the arcology.

Neighboring colonies question whether the Bhombil will have the requisite raw materials and attention span to complete this project even if they figure out the technical difficulties; it’s expected to be completed within the next thousand years.

Xox

Nestled in a natural cleft, the forest where the Zkirax make their main colony is lush, verdant, and teeming with voracious predators. A modern city completely in tune with nature around it, seemingly grown from the very materials of the planet itself, Xox commands picturesque views of waterfalls, cliff faces and wide sweeping vistas, where it peeks through the forest’s canopy. Tall, crooked spires mimicking the tops of the surrounding trees contain fabulous workshops and laboratories where adult Zkirax work, surrounded by the inspirational majesty of Auruta 90DX and the companionship of their clasps.

Zkirax’s "independent" phase of life where they do not wish to be part of a colony, combined with the extremes present on Auruta, means that a much higher portion of their young do not make it to adulthood than on their home world. As result, Xox, like the handful of other Zkirax colonies on Auruta 90DX, has grown very slowly.

Xox’s official population is small, home to about 5000 adult Zkirax individuals. It’s estimated that there are at *least* 60,000 Zkirax nymphs living in the wild surrounds. The Zkirax keep the actual number of young a closely guarded secret.

Only a few paths run into the colony from the outside, and only one of these paths is metaled to carry the weight of industrial vehicles. These blots on the landscape are cleverly concealed by tunnels and strategically placed native flora. Though embracing the benefits of high technology, the Zkirax lovingly craft their homes with easily renewable materials and in designs that support and flatter each other. Their philosophy holds that the buildings in the colony should complement the colony, just as the members of a clasp complement a clasp.

Power from geothermal and solar collectors enables the colony to maintain another form of harmony with nature. Should the Zkirax disappear from Auruta 90DX, time would quickly wipe away nearly every trace of their having existed.

In an open plain about ten miles from Xox, the Zkirax maintain a runway and launch facility for their occasional long-distance requirements. Compared to other settlements, this facility is rarely used, other than for the rapid importation of perishable goods and their very infrequent ambassadorial or trade trips to other settlements. Xox also maintains a squadron of transport ships, supplying any official needs the Zkirax might have.

Zkirax do not tolerate the cold well, and Xox all but shuts down for super winter -- it's considered a season for clasps to stay indoors together and enjoy each other's company without distractions of work.

Governance and law

Each clasp chooses one representative that will speak for it at council meetings. Each of the councils will then choose a representative to speak for it at a super-council. Most governing is done by consensus, but a vote of the super-council is binding law.

The various clasps that initially founded the city had laid out a comprehensive development plan for future expansion, combining subterranean, arboreal and artificial constructions to offer a high quality comfortable and environmentally friendly growth pattern, which would allow for continued growth over the next few centuries. Not only is the plan environmentally friendly, but the city amenities are incorporated into a logical plan to provide equal as possible access to all citizens, reducing the amount of waste and travel individuals would have to invest to exist within the city.

The super council can and does make changes to the city plan when new needs or knowledge arise. Such changes are approached with great seriousness, heavily debated, and many studies are commissioned to research the long-term implications of any proposed change.

Each clasp is expected to police its own. A clasp that contains a repeat offender that causes harm to individuals outside of its home clasp is considered to not be capable of policing itself, and the entire clasp is then punished as one, often through exile from the colony. This threat of harming all of your best friends and chosen family is enough to keep crime exceedingly low, and when this norm is violated, clasps are often draconic in their punishments toward their offending members. After all, the offender has betrayed the entire clasp's trust and endangered all its members.

Zkiran forum hall

Firmly rooted at the very center of the colony is the great wooden arch of the Zkiran forum. The interwoven scaffolding of the building consists of a hundred and eighty Aurutan Oaks, cunningly grown and woven with other vines and plants to provide a shaded, waterproof gathering place for the representatives of each clasp. The delightfully shaped bowl of the auditorium seats approximately 5000 people, and easily double that on the ceiling lattices; but has never yet been filled. It is designed with the future in mind, when the colony may be much larger than it currently is.

When Zkiran forum is not in use for council meetings, it is often used to host concerts, conferences, and social mixers for young adults who have yet to find their clasp-mates.

Defense

At the pinnacle of Zkiran forum hall is a bright, jeweled bauble that glints in the sun. Its purpose, other than as an ornamental topper, is the colony's primary defensive structure against attacks. It is capable of multiple, directed energy blasts that can intercept and destroy missiles and vehicles. Several smaller such baubles are dotted around the city, doubling as public artworks when the city is not under threat.

This point defense system is rarely used, as the Zkirax utilize a range of stealth technology to camouflage the city from sensors and jam and confuse targeting solutions with great efficacy.

The tens of thousands of Zkirax nymphs living in the wilds around Xox provide more than enough security against any unwelcome overland incursions, and can be loosely organized and directed by the colony.

Trade and exports

The colony is self-sustaining. However, it requires ores, minerals and other manufactured goods which are not available locally in bulk to supply its laboratories. The Zkirax have a taste for Aurutan fish, but strongly dislike open waters, and so import seafood from other colonies as a luxury.

With their adults so dedicated to research and higher pursuits, the Zkirax are technologically advanced and often consult with other colonies on matters such as engineering, city planning, physics, mathematics, and more. Income from these consultations is taxed, which allows the city to fund its general needs.

SCIENTIFIC ANOMALIES

Deep Tech

Artifacts recovered from Auruta 9ODX's deepest oceans.

Several decades ago, a Selenoid vessel discovered a piece of metal half-buried in the sand on a remote island on the night side. Studies revealed that it predates the colonies by thousands of years. It consists of a curved piece of casing created from alternating layers of nickel-based single crystal super alloys and "mosibtic," a molybdenum-silicon-boron alloy reinforced with titanium carbide. Carbon dating the mosibtic puts the "deep tech" at around 5,000 years old.

Since the original discovery, more artifacts have been discovered along shorelines all over Auruta, primarily around the equator. It is theorized that they were kicked up from the deeps by oceanic activity (primarily sea-geysers), since the alloys often used in their creation are capable of withstanding extreme pressures. Many of the finds are, like the original, pieces of casing or chassis from unknown machines or vessels. The largest piece is roughly 2 meters by 1 meter in size. Other pieces are components of unknown machines such as dowels, bushings and spars. Some of the artifacts are created from glass or unusual biopolymers that appear organic, but are plastic in nature.

As of yet, none of the colonies have developed a way to explore the deepest parts of Auruta's extensive oceans, but the discovery of deep tech has created a drive to develop it. Several research groups are working on ways to recreate the pressure-resistant alloys found among the artifacts. It is theorized that the deep tech would need some kind of coating to withstand the acidity of Auruta's deep oceans, but any such coating hasn't withstood the test of time, leaving it yet another hurdle for researchers to overcome.

Whether or not anything substantial remains of the deep tech's origins is a mystery. Electrical signals from the water and core confuse most sensor arrays, and the deeper someone attempts to probe, the more interference they will find, making long-distance scans nearly impossible. No cultural items have been discovered, leading some to theorize that the deep tech is part of an ancient scientific research facility created by offworld aliens. Others believe the deep tech is a sign that Auruta 9ODX once had sapient life of its own. And there are a rare few that believe there may be "deep ones" still living down in the abyss...

Iverson's Triangles

A remote, roughly triangular island. The sea around the island has a notably lower salinity than the surrounding water, and its own unique currents.

The island itself appears to be divided into four interior triangles, three at the corners and one smaller, central area.

One of the corner triangles contains an active volcano. Analysis indicates that it has not erupted for hundreds of thousands of years - yet over the many years it has been monitored, it has consistently been at a pressure that should force it to erupt with a fury that could cause a volcanic winter. Thus far, no one knows why it has not erupted beyond minor vents and lava flows. No plant or animal life has been observed inside of this triangle.

The next corner of the island is covered in gently rolling hills. However, it's been pointed out that tectonic activity would not explain these hills. They are covered in several feet of snow, and are subject to frequent snowfall.

The final corner triangle is idyllic; covered in tall trees and beautiful flowers. It stays at an almost perfect 72 degrees Fahrenheit almost year round. Large populations of radiant sunwings make night time in this area spectacularly beautiful.

The fourth, central triangle is nothing. Just bare, undifferentiated dirt. Nothing grows in this triangle, and animals seem to avoid it. Equipment brought into this area frequently malfunctions or fails, and thus far every attempt at excavations has been foiled by battery discharges and equipment that refuses to turn on.

Where these triangles meet, there is no gradual transition between their biomes and weather -- there are clear, as yet unexplained boundaries between them, so that it is possible to stand at the edges and watch gentle snowfall in the second triangle that never crosses over into the other three.

There is a popular legend that the island got its name after a terran named Jonathon Iverson who led a small expedition that planned to excavate the central triangle using only hand tools. Communication was lost during their first night on the island, and no trace of the expedition was ever seen again.

It is theorized that this island was part of some long abandoned experiment. But by whom?

Luminoxium

An alloy that is black and glossy in appearance, yet emits a temporary glow when struck against a hard surface, exposed to temperature changes or moisture, or when exposed to another mineral or chemical - all of which differ depending on the specific alloy. All forms of luminoxium are black and emit a glow when struck against a hard surface (this has made it popular for novelty weapons, especially swords). There are five known isotopes of this metal, which can be found in different environments on Auruta 90DX. Studies made on luminoxium reveal that the variations of color and reactions are due to different levels of minerals being present. All forms of luminoxium can be refined for use in weaponry, architecture, jewelry, currency, and more.

Luminoxium-geo: The most common form, this metal emits a yellow glow when struck against a hard surface and when moisture levels change - making it particularly easy to find, as it can only be found in underwater veins and caves. This form does not require special equipment when smelting.

Luminoxium-neo: The second-most common form, this metal emits a green glow when exposed to extreme heat and when struck against a hard surface. It is difficult to look at when smelting, as the extreme heat causes it to glow a bright, neon green. It is wise to invest in eye-protection when smelting this form. It can be found in several regions of Auruta 90DX, but the most common place is near clay deposits.

Luminoxium-posi: An uncommon form, this metal emits a purple glow when exposed to extreme heat and when struck against a hard surface. It is nearly blinding to look at when smelting, as the extreme heat causes an intense purple glow. It is wise to invest in eye-protection when smelting this form. It can be found near the shoreline or salt deposits.

Luminoxium-seni: Another uncommon variant, this form emits a white glow when struck against a hard surface or exposed to cold temperatures. It is particularly difficult to find, as it is found near volcanic activity and it blends perfectly with its surroundings. It takes a trained eye to spot this form. On occasion, after a quake in the sea or a particularly rough storm, this alloy can be found washed ashore. This form does not require special equipment when smelting.

Luminoxium-rudi: The rarest form of luminoxium, this alloy emits a red glow when struck against a hard surface or exposed to a variety of minerals, as well as when in contact with moisture. This form is found beneath the surface of just one area on Auruta 90DX, a box valley in the westernmost mountain region - possibly due to unique conditions when the planet was forming - and can only be found under special conditions, such as after a lightning storm (exposure to moisture). Due to its rarity, it is not smelted often and few have experience working with it. Only the most skilled craftsperson can smelt this form of luminoxium. If done incorrectly,

the final product can be brittle and shatter easily - but if done with a skilled hand, it is perhaps one of the most resilient materials. If it is used for a blade, it will never need sharpening.

SAMPLE ADVENTURES

The Isle of Dr. Blim Frinifrink

The first indication to outsiders that something is amiss is the disappearance of a mining party. When they have not checked in for several days, the PCs are sent to discover what has gone wrong.

Upon reaching the mine, the players discover the mining equipment that was being delivered, scattered at the entrance, as if the miners had come under attack. Further examination of the site indicates all plant life in the vicinity is dead. More aware PCs will note the lack of animal calls.

There is no blood, spent casings or blast damage. Indeed, beyond the disarray of the equipment, there is no trace of combat at all, but that equipment and the nearby vehicles are hot to the touch and radioactive. Prolonged contact will cause injury, but without appropriate detectors, the players will not be aware of this until their first radiation burn or the sudden taste of metal.

No matter what time of year this is set, the temperature is pleasant, but will slowly return to the normal conditions for that time of year. For example, if it is winter, when they arrive in the area they will note that it is unusually balmy. When they emerge from examining the mine, it will be snowing again.

Upon entering the mine, the players will discover traces of a hurried retreat into the depths of the mining tunnels. Other animals and mobile flora have also retreated into the mines. Some of these animals are predators and will be confused, angry and hostile if encountered.

With enough exploration, the remains of the mining party will be discovered at the lowest point of the mine. Of the 30 people, only one survivor remains, who is close to death. If given immediate medical aid, the miner will regain consciousness long enough to speak briefly.

The miner's eyes flick open, and they gasp for shallow breaths. The tell-tale effects of acute radiation sickness mark their skin with deep burns, and a stream of bloody spittle leaks from the corners of their mouth. With some struggle, they manage to rasp out, "We had no warning. It just got warm, and the sun was so bright. I felt my hands blistering and sticking to the tools as we unpacked the trucks. Someone looked up and went blind immediately." They close their eyes again, and their breaths become short and ragged. "I wish I knew what happened to us." And then they are gone.

The players can choose how to deal with the bodies. The dosimeters that each of the miners carries are fully exposed, indicating massive doses of radiation, but nothing else of use to the investigation can be found on any of the miners.

Knowledge of science or nature tells the players that the planet is well protected from Aurut's radiation by its magnetosphere, which means that some disturbance has allowed the radiation to penetrate to the planet's surface.

The players have a number of different avenues to track down the source of the disturbance; they may use astronomical equipment to see that there are eight new satellites in orbit around the equator that have just come online within the last month. Based on the spacing of these satellites, it appears that there are meant to be 10 total, if they are all to be spaced equidistantly. They may use local knowledge to dig up rumors about satellite launches that have taken place recently, as well as the general direction from where they have been launched. They could use knowledge of economies to discover that there have been custom orders for unusual satellite parts, including focusing crystals and containment units for reactors that are of staggeringly high grade. These items have to be produced by advanced material science labs, which might give a delivery address if interviewed. They might also trace the fuel required to launch these satellites.

They may put together on their own - or with the aid of more knowledgeable NPCs should they seek them out - that the Bhombil homeworld is known for its mastery of weather technology, which can sometimes influence the amount of radiation retained by a planet. Their technology makes use of networks of satellites, spaced equi-distantly around the entire planet.

However they find out, it will eventually lead them to an island, the caldera of an extinct volcano. There are no obvious buildings on the island, but it is patrolled by automated security bots, gun turrets, laser trip wires, aerial drones, etc, whose task is not to kill but to capture and detain intruders.

If the PCs evade capture, they can eventually discover the above-ground entrance which is a very well concealed landing platform for air vehicles. It's concealed by artificial trees that are designed to fold down flat when a vehicle comes in; otherwise it just looks like more canopy. The landing pad is actually an elevator, so when a vehicle lands, it is carried all the way down into the sea base, and then moved on conveyor belt into the hanger.

If they are captured, they are tranquilized, and wake up in an automated holding pen on a sub-level of the base. They are awoken by the sound of the ninth satellite being launched.

The base is constructed within the volcanic plug, beneath the water. Areas inside the base include the satellite launch facility, the satellite construction assembly area, laboratories, a command center, accommodation area for up to 20 Bhombil crew, a robot/drone production and maintenance area, the air vehicle hanger, and the holding pens - which contain examples of flying, marine and terrestrial life forms that were mistakenly captured and brought in by the drones patrolling the island. The areas are connected via a warren of lava tunnels, which are easy to get lost in.

The base is run by Professor Blim Frinifrink, an astro-meteorologist. His support staff of 20 Bhombil scientists and engineers are similarly specialized in weather control technology. They have already begun the weather control experiments in limited areas. However, their data collection is faulty -- the areas where their weather modifications are taking effect are suffering extensive radiation damage from a thinned atmosphere and de-polarized magnetosphere. This radiation is fatally hazardous to organic life. Their data recording only shows a consistent temperature and precipitation rate; they are not monitoring for radioactivity. In their haste, they have been working sloppily and cutting corners.

Professor Frinifrink and his team are *not* evil. Professor Frinifrink lost his only child, a daughter named Upp, to Auruta's super-winter just three years ago. His grief is immense, and he cannot stand the idea of letting Auruta's "mad, vicious, useless weather" take any more lives when there's something he can do about.

"Do you know how many sentients die every year on this blasted planet? From the cold? From the heat? Thousands. Exposed, out there. I won't hear of it anymore. I can stop this, and so I must. You can't stop me. If your goal is to save lives, you shouldn't want to stop me."

His team members have similarly tragic stories motivating them. They intend to use their weather satellites to bring about an end to seasons on Auruta, maintaining a pleasant spring indefinitely. They are aware that stopping the natural cycles of the planet will mean massive extinctions and untold ecological consequences -- the Bhombil homeworld went through this same process once, after all. They are also aware that the colonists of Auruta 90DX have treaties that ban all weather control experimentation, because of the grave consequences it can have. But they imagine that over the long-term, the number of sapient lives that can be saved once the planet stabilizes and adjusts to losing more than half its native species is worth that price; worth almost any price. They imagine that if they will make the hard, brave choice, eventually everyone else will come to thank them.

They don't wish to hurt anyone if they can help it. If made aware that they are causing radiation hazards, they will be greatly concerned. However, their concern is not enough to stop their experiments, only alter them. They will continue to attempt to end Auruta's seasons, but make modifications to try and do so without causing (long-term) radiation problems.

It's up to the players how they stop the experiments. They may attempt to destroy the base, make contact with outside authorities, or perhaps they will even agree with the scientists and try to assist them in their mad quest.

If Professor Blim Frinifrink is attacked directly, the drones will switch from non-lethal to lethal deterrence and close in.

Race to the Pole

Auruta's northernmost pole has never been successfully reached by a land-based expedition, and "north pole fever" has swept through Glacier Step. Fiction and speculation about such a journey is booming, and now, inevitably, two famous Selenoid adventurers have declared that *they* will be the first to accomplish the feat.

At 35 years old, Alasse Glaci is elderly by Selenoid standards. Her past adventures charting inaccessible and dangerous Aurutan landscapes are legendary among Selenoids, and she says she will continue to explore Auruta until her dying day. Perhaps it will even be the treacherous passage to the north pole that claims her; but she's willing to risk it all to be the first to put a flag - the Glacier Step flag - at the apex of the planet.

Kiirion Orimys is a 17 year old wunderkind, best known for stunts involving Auruta's wildlife. Her videos are extremely popular on Aurutan social media, especially the one where she managed to ride a sky leviathan. Unfortunately, her reputation has recently been marred by accusations that some of her stunts have been faked. She vociferously denies this, and has announced that she will prove her dare-devil bonafides by beating Alasse Glaci to the north pole.

The AI for Public Recreation and Morale (nicknamed "Ol' Parks & Rec" by citizens), sensing an opportunity for generating some civic pride, stepped in and negotiated terms of a competition between the two. The race is to begin in two weeks, at the northern gates of Glacier Step. The first team to plant their flag in the apex of the north pole *and make it back to the starting line* with at least one surviving expedition member will be the winner of fabulous prizes and fame. Broadcast drones will accompany both teams to document (or sensationalize) their adventures in real time. The expedition is expected to take several months to cover such a large distance, and in such difficult conditions.

Only ground methods of transportation are allowed - no skimming, hovering or flying of any kind. Teams must carry all supplies they will need for the journey with them, as they may not be resupplied or given outside help later, and both teams are given the same moderate financial and weight budgets to work with for all starting supplies. However, hunting and gathering for

food, water, natural remedies or even fuel is permitted should an expedition team find their supplies running low.

The rules stipulate that a team that sabotages or assaults the other team will be punished by a reduction in prize money should they win, as well as publicly shamed. But the rules conspicuously do *not* state that those who violate the prohibition on interfering with the opposing team will be disqualified. Maybe Ol' Parks and Rec is shrewder about producing gripping holo-content than anyone gives it credit for. Maybe it's just tired of organizing family-friendly aurora watch parties for the past couple of centuries.

Alasse Glaci contacts the PCs to join her expedition team. She wants a clean competition and is firmly opposed to doing anything to sabotage Kiirion's team, but she is concerned they may not share her sporting attitude. She asks for help preventing equipment tampering before the expedition gets underway, and for protection on the journey.

The PCs may become involved with and influence the planning of Alasse's expedition if they wish, including how she allocates her supply budget. Teams are not allowed to go shopping for their own equipment; all requests must go through Ol' Parks and Rec, who makes certain that neither team receives unusual discounts or favoritism from vendors.

Unless dissuaded by PCs, Alasse will make use of low-tech sledges pulled by Wegener hounds, genetically engineered by Bhombil scientists to have thick fur coats, and specially trained to work as a team to pull sleds. She believes that this will allow for the most adaptability and least dependence on heavy fuels; though it will oblige the team to hunt for meat, and to let their animals rest.

Kiirion opts for ultra-modern treaded orb vehicles, that allow the rider to sit in comfort and keep a near constant pace, day and night -- but are less adaptable to terrain obstacles and require toting large quantities of fuel.

Ol' Parks and Rec will have all equipment delivered to each team exactly three days before the competition begins, to allow some time for testing.

The PCs will likely put their equipment under heavy guard before leaving Glacier Step. However, there will be no tampering attempts during this time period.

Basic equipment tests will show everything functioning in good order. If they bring in experts on the equipment and put it through extreme testing, they have some small chance of discovering and repairing minor manufacturing defects, such as mechanical components that have been lathed just a little too thin - nothing that would prevent the equipment from turning on and functioning normally at first, or from showing up in anything but the most rigorous and expert

inspection and testing. But just enough that the items have a higher chance of failing when pushed hard for long periods of time.

If discovered before leaving and investigated, they will be unable to prove any individual case involves anything other than bad luck or honest mistakes, such as a shipment of alloy with an above-normal level of impurity having been delivered to the factory that week.

If any of these issues are turned up before the expedition departs and are reported, Ol' Parks and Rec will have the equipment immediately replaced at no additional cost, and dispatch inspectors to check Kiirion's equipment as well.

Finally, the day the race is to start arrives. The teams are paraded through the city on colorful floats, while admirers wave and throw them flowers and well-wishes, before they arrive at the heat-lock gates that lead up to the surface of Auruta. The teams shake hands for the broadcast drones, the doors open, and the race begins.

The first leg of the race is good clean competition, with the many hazards coming from environment and hostile wildlife.

However, the further north they get, the more magnetic storms they encounter. These storms disable equipment, including the docu-drones -- and while there are no referee eyes to witness it, Kiirion's team will begin openly sabotaging equipment and supplies. Skirmishes between teams may be possible. And with every mile, the temperature drops...

As a possible twist, the GM may choose to include a traitor embedded in Alasse's team. GMs may also wish to familiarize themselves with Auruta's range of natural disasters before running this plot.

CREDITS

Thanks to the following RPRepository.com members for contributing to this setting…

- Angelus-Relator
- Auberon (http://deviantart.com/alluvial)
- Boneless
- Caliburn
- Darth_Angelus
- DyingEmbers
- Great7
- Heimdall
- Jenamore
- Kamizombie
- Kim
- Novatrix
- Prescience
- RedPandaFox
- Shinyrainbowlithogra
- SolarLoki
- Staticnightmares
- Stiltski
- TetriLys
- Vespin