

SPECIES NAME: PHYLOSIAN

VISUAL REPRESENTATION



SPECIES ADJUSTMENTS

+1 Strength, +2 Agility, +3 Intellect, -2 Vitality,
Presence -2, Perception +3

PHYSICAL DESCRIPTION

External Physiology

The Phylosians evolved from a plant form with pentahedral symmetry, meaning that it spread out from a central core at 5 points. This is a common form seen in many plants across the galaxy. They have 5 legs they use to walk with. Although they have 7 tentacles that they use as manipulators, this is misleading. They initially have 10 in their early developmental stages, but these are reabsorbed into their anatomy until they reach adulthood. The space occupied by the missing tentacles is taken up by their reproductive organs, which reside on their back, just below their neck and above their torso. With no need to eat or breathe, they have no need for a mouth. This means they have no sense of taste, and no conception of what tasting is, although their ability to absorb nutrients through their skin is probably as close as they can get. Of course, their lack of a mouth would seem to point to their being mute. They have evolved a small membrane that they can vibrate to generate sounds. It is located on the underside of what would be a humanoid chin. They can only vibrate it at ultrasonic frequencies, making it inaudible to most other humanoids. One of the first pieces of technology they learned to create was an ultrasonic transducer, which would convert their ultrasonic vocalizations into a form that was at a lower frequency that other humanoids could hear. They wear it as a hexagonal voder hanging around their neck.

Being plant-based, their anatomy is simpler in comparison to animal-based life, and as a result, with access to the proper organic materials, they can heal themselves from extremely grievous wounds short of decapitation. Since they don't breathe oxygen, they can function in hypoxic or anoxic environments for short periods. They also have the ability to communicate over short distances through the use of pheromonic compounds. When they are unconscious, their bodies become completely rigid, a failsafe mode built into their physiology.

They can hear through auditory sensors located across their head. It works like their vocal membrane, but in reverse, converting external vibrations directly into a form their brains can understand. Their sensory capacity is such that they can't be ambushed. They are cold-blooded, with their level of activity mostly dictated by the ambient temperatures. Compared to most humanoids, they seem lethargic, but this is only due to their physiology.

Each of their 7 tentacles can be independently controlled, allowing them to multitask at up to 7 separate tasks at once. They are capable of fine manipulation with the 2 fingers at the end of the tentacle, or are able to wrap the tentacles around an object for gross manipulation. Their juvenile form is nearly 2 meters tall and is mobile, while their adult form is nearly 10 meters tall and is immobile.

There are 3 major subspecies of Phylosians, each adapted for a general climatic regime: one for cold climates, one for warm climates, and one for desert climates. The cold-adapted ones have an antifreeze compound in their system to allow them to withstand the colder temperatures. The desert-adapted ones have a thicker skin, and have a more waterproof skin, resembling a mobile cactus. The 3rd species is the one first met by Kirk, and is the most well-known of the Phylosians. Even though they are interfertile, each of the subspecies tends to reproduce with their own group. They are immune to all known animal-based diseases.

Their distant ancestor resembled the Terran gymnosperm, having no flowers to reproduce with. They can reproduce asexually if the need arises, but prefer to reproduce sexually by genetic exchanges, since asexual reproduction is self-cloning, and ends their genetic variation. They reproduce sexually by releasing pollen into the atmosphere. They are hermaphroditic, capable of both siring and bearing offspring. The offspring bud off from the parent out of the reproductive organ on their back, in which they can carry up to 3 offspring at once. The offspring detach when they are at a primitive level of development, and are placed into a nutrient-rich soil. They grow rapidly at first, but still remain in the soil container until their anatomy has matured for them to physically support them.

Their eyes are on flexible stalks, and are located on the front of their heads. They use optical pigments comparable to those found in the retinal tissues of other humanoids. It is believed that they may have had up to 10 eyes at one time in their past, but they slowly lost the others, leaving only the forward-facing pair.

With no internal skeleton, they are capable of rotating their neck nearly 180 degrees to the left or the right. They have 2 different type of chlorophyll in their bodies: a lighter one from their shoulders up, and a darker one from their

shoulders down. They are nearly 190 cm tall, and roughly 120 cm wide at their shoulders. Their head is 24 cm wide, 27 cm deep, and 27 cm high, and is covered by short spines similar to those found on a cactus. Their tentacles are 60 cm long, ending with a 2-digit manipulator 9 cm long. They are 6 cm in diameter at the shoulder, narrowing down to 3 cm at the wrist. Their legs are 96 cm long and 15 cm in diameter at their widest. Their feet are nearly 25 cm long and 24 cm wide. They have 10.5 cm long eyestalks, ending in 1.5 cm diameter eyes.

They are sensitive to changes in atmospheric conditions, such as humidity and temperature, and can detect minute concentrations of chemicals or pollutants in the atmosphere. They are especially vulnerable to intense cold, which can cause their cell walls to explode as they freeze. Exposure to cold temperatures puts them into a metabolic torpor, rendering them immobile until they warm up again. They are violently sensitive to most known botanical maladies. They can temporarily alter certain skin patches by directly absorbing non-toxic colored chemicals, similar to humanoids altering their hair color. Only juveniles would usually do this. As mobile juveniles, they have a lifespan of at least several centuries, but as giant immobile adults, this span can reach millennia.

Internal Physiology

Their internal anatomy also evidences their pentahedral symmetry, with most of their internal organs residing in any of 5 spaces at each level of their body. Each organ is in a self-contained capsule, making them very tolerant of damage. Some organs are present in multiple copies, giving them another level of redundancy.

Being autotrophic forms of life, they have no need to digest food, since they gain all of their needed energy from the sugar created by photosynthesis. This means they have no digestive tract at all, and since they absorb CO₂ directly from the atmosphere, they have no need for lungs or breathing. They can even survive short-term immersion in water, since they don't breathe. This simplifies their internal anatomy significantly in comparison to other lifeforms. They have no need for organs of digestion or respiration, but still need those that have secondary functions unrelated to either. They have hormonal glands that are unrelated to digestion and respiration, such as those related to growth, maturation, and immune responses. With no pancreas, they are immune to diabetes. They have a need for a circulatory system, to transfer nutrients around their bodies and remove wastes. They have a massive heart which accomplishes this. They have a 3-lobed liver, which acts as a detoxifying organ, and a 2-lobed spleen, which holds much of their immune cells. This is because they have no marrow to grow it in, since they are boneless. They maintain their upright posture through the use of a hydrostatic skeleton, which are pressurized tissues that can emulate the functions of both a musculature and a skeletal system.

Their circulatory fluid, or blood, has no hemocytes,

since it is carrying no oxygen to the tissues. The blood itself carries the CO₂ from their photosynthetic cells on their skin surface to their internal tissues, which become less able to photosynthesize as their distance from the skin increases. The blood takes the O₂, which to plant tissues is an unusable by-product of photosynthesis, and releases it through pores at the skin's surface. It also carries the various types of sugar to the other body cells.

To maintain the proper level of fluids in their bodies, they also have a highly efficient 5-lobed kidney. It removes unusable chemicals from the blood that the liver can't remove, as well keeping their internal fluids in balance. They don't excrete urine, since their bodies are able to utilize the chemicals that would be found in it. When they have to excrete excess water, they convert it to water vapor and emit it through their pores. This helps to keep their skin moist and pliable.

They have a lymphatic system to help in excess fluid removal as well as some immune responses. This works like other lymphatic systems, using osmotic channels to transfer fluids. They also have bi-directional sebaceous glands, allowing them to absorb or expel water and salts from their system.

Their metabolic rate can be accelerated by exposure to a light source brighter than standard Phylosian lighting. Of course, overexposure can cause their metabolism to accelerate so much that their enzymes start to break down, collapsing their physiology. They usually only do this to repair severe anatomical damage, and only under strict medical supervision.

Phylosians have an inbuilt genetic switch that accelerates their natural decomposition. They can override this to some degree through sheer force of will. This can also be consciously activated by them should they choose to end their lives, a similar characteristic found among other species with extreme longevity. Once they decide to do this, there is no turning back, because it induces massive destructive changes in their physiology. The final effect is the release of a chemical into their system that allows their normal internal decomposition bacteria to multiply exponentially faster. Normally, while they are alive, they secrete a hormone that neutralizes this chemical.

They are extremely sensitive to herbicides and similar chemicals. Their internal fluid pressure is such that even minor cuts can cause them to lose their fluids quickly, putting them into hydrostatic shock. This would cause them to lose the ability to stand upright, let alone move. The weight of their own tissues against their internal organs can cause cellular damage very rapidly. The remedy is to usually tourniquet the wound until their own internal fluids reseal the damage. Their blood alters its viscosity based on the water levels in it. When they are cut, the fluid starts to leak out, altering the level of hydration. When it is exposed to oxygen gas, the fluid starts to coagulate, sealing the wound. It is slowly reabsorbed into the body as the cut heals.

If soil is unavailable, they can absorb the necessary nutrients from a specially formulated hydroponic solution. They can absorb nutrients directly through their entire body surface if necessary, but they prefer to absorb their nutrients through the pores on their feet. This is

advantageous to them: in case of grievous injury, they can be completely immersed in a nutrient solution suffused with dissolved CO₂ gas. They are able to heal many times faster than normal using this method.

If a body part is accidentally severed, it can be reattached, but only if the internal necrosis factor hasn't activated yet. Once this happens, the part rapidly begins to decompose. If the factor hasn't activated, they can induce stem cell formation at the injury site, allowing the part to rapidly reintegrate. When fully healed, it is virtually impossible to see the wound visually.

Brain Physiology

Their skull casing is composed of stiff plant fibers, offering protection to the brain, but is still soft enough to be flexible. They have a pentacameral brain structure, meaning that their brain structure is subdivided into 5 lobes. They have a primary lobe, located at the front of their head. It is attached to their 2 eyes, which are on flexible stalks reminiscent of Andorian antennae, as well as to their forward auditory sensor and forward olfactory sensor. Except for the eyes, the other 2 sense organs have a corresponding duplicate linked to each lobe of their brain, giving them circumambient hearing and olfaction.

Each lobe is approximately the size of a humanoid lobe, giving a greater than average brain capacity. This means that they have capacity to spare, so they are able to allow up to 3 lobes to become dormant at once, giving them the chance to 'sleep'. Being plantbased, they can photosynthesize for as long as light falls on their skin. This also means that they have no need to sleep like other humanoids do, but do have to allow their lobes to become dormant for creating memories and for consolidation of new information.

They have a large pentacameral cerebellum, allowing them much greater control over their autonomic functions. This frees up much of their cerebrum for thought, and is believed to be the reason that the Phylosians evolved the way they did; their cerebellum took over so many functions that their cerebrum was able to expand more rapidly during their evolution. In fact, scans of their brains have determined that their cerebellum controls up to 30% of their physiology, leaving nearly the entire remaining 70% free for conscious thought and memory.

Their cerebral lobes are well integrated by a corpus callosum structure linking the 5 lobes together. With such a simple physiology when compared to animal life, they are able to have more of their brain capacity free for thought, and not spent on things like digestion and respiration. Since they evolved from a non-animal ancestor, they didn't evolve emotions that would have arisen from animal ancestors. They don't have any emotions of territoriality like reptiles do, or the intense emotions that mammals do.

When resting, they usually stand in a nutrient soil, allowing them to access it unconsciously. When they do choose to sleep, it is usually to repair substantial

wounds. This allows them to concentrate their internal resources on repairing the wounds. This can accelerate their normal healing rates many times over.

With so little emotional range in their psychology, they are virtually incapable of being offended, or acting rashly based on emotions. They are highly logical, very similar to Vulcans that have achieved the state of Kolinahr. They have eidetic memories, and a vast memory capacity comparable to several humanoid brains. The eidetic capacity also extends to their motor cortex; they have photographic reflexes, enabling them to replicate any movement they've observed, and are physically capable of duplicating.

They are also capable of learning to speak any spoken language very rapidly. They have no facial expressions, so their brains don't have to control them. This, of course, means that they are incapable of understanding the nuances of non-Phylosian body language, making them socially awkward until they have decoded them. They have a minimal limbic system, since they have minimal emotions. Since they have so much control over their physiology, they are incapable of getting cancerous growths; they could induce cellular necrosis in them before they got too large.

Adult Form

Once a Phylosian reaches the end of their juvenile reproductive phase, which can last for several centuries, they slowly begin to transform into their immobile adult form, undergoing an irreversible genetic change. Their legs become stiff and begin to fuse together, with the hollow area in the middle beginning to fill in with new material; this will become their taproot. Their feet then begin to convert into massive root structures, and embed themselves into the ground, ending their mobile phase. Once they start to absorb nutrients from the ground, their growth rate accelerates until they reach their final adult height of 10 meters, after which their growth rate slows down substantially.

Their reproductive organ becomes nonfunctional, and begins reorganizing its cellular structure into the previously missing 3 tentacles. Their tentacles begin to tilt upwards, and then structurally stiffen. The skin begins to spread open outwards from the tentacles, becoming leaves. This will substantially enhance the surface area available for photosynthesis. Their neck fuses to their shoulders with new growth. Their eyes slowly become vestigial, with the eyestalks retracting to the head, eventually fusing to it. Open spaces between the appendages begin to fill in with new materials, slowly encasing the head. Their outer skin becomes more bark-like, and come to resemble trees. They are still aware of things around them, but become less concerned about them. Once they reach their final adult form, their ability to regenerate damage quickly drops off dramatically. Their necrosis factor for severed parts becomes inactive.

As adults, they spend most of their time in contemplation in a psionic gestalt, since their brains are now many times larger than they were, and are no longer concerned with movement. This freed them to think about problems of logic, theory, and other similar subjects, becoming the philosophers of the culture. When these adults finally die of old age, or due to other factors, like damage due to weather-related phenomena, their knowledge remains as part of the

group's gestalt mind.

matches can last for hours.

CULTURE

Since they never had the need to go through the hunter/gatherer stage, they never had wars over resources. Violence was unknown to them until they began visiting other worlds. They have no understanding of the concept of prejudice. Being pacifists, they never had the need to create weaponry beyond that needed to defend themselves from predators.

Their afterlife belief is that when they die, they will become one with their world, and will eventually be reborn. They are buried in the ground with no coffins, allowing their decomposing bodies to enrich the soils. For those Phylosians serving in Starfleet, there is a standing order to try and return their bodies to Phylos II for internment whenever feasible. If this is not possible, then they ask that their bodies be buried in the arboretum space of whatever vessel they were serving on at the time of their passing. This allows them to be a part of their friends' lives after they are gone.

Since they can have multiple offspring at once, and they tended to be taken by predators in the past, they have learned to become less emotionally attached to them. They care for them, since they are their offspring, but they don't form the deep emotional attachments that most humanoids do. Other species see this and think that they are uncaring, but it is completely logical given their evolution.

Because of their biology, they became aware of the concept of cloning very early, but were forced to wait until they created consciousness transfer technology before they were able to make themselves an immortal culture.

Because of their access to so much of their brain's capacity, they learned about psionic abilities early on. They didn't give them much thought, since they usually only manifested telepathic or empathic abilities. As a result, they don't have any connotations about them, positive or negative. If they manifest them as juveniles, then they do. If they don't, then they know that they will as immobile adults.

They have created all types of musical instruments except for wind instruments, which require breath to make them function. They have tried to make some of them, using bellows to generate the moving air, but with limited success.

Being pacifists, they prefer not to react offensively, but also being highly logical, they understand that others don't share their viewpoint. They have learned multiple martial arts styles from Federation members, concentrating mostly on the defensive arts. They are especially fond of Aikido, which uses the opponent's movements and energy against them. They like judo for its use of throws and locks, and Tai Chi for its fluid movements. They have also taken sumo wrestling and adapted it to their own physiology, since it is mostly just a matter of leverage, and with 5 legs giving them a very stable base to push against, Phylosian sumo

There are those Phylosians that are fascinated by offensive systems, and are quick studies. The sight of a Phylosian holding swords and other edged weapons in preparation for an offensive attack is a scary sight to behold, and one that few of their victims have lived to tell about. With their 7 arms, they can hold multiple opponents at bay at once. Like the Vulcans, most Phylosians prefer to enter the sciences, but for those few that choose to enter Security, they turn their formidable intellectual faculties towards the field with the same intensity. And with their need for little sleep, if they are confronted with a problem, they are very tenacious, and can pursue the task for extended periods.

LANGUAGES

Phylosians are only able to speak their own language, of ultrasonic vibrations, but can be understood by most species they encounter due to their voders functioning as a type of universal translator.

They are also able to understand most languages spoken to them, in similar fashion.

COMMON NAMES

Phylosians have names in their own language, or at least what passes for a name to them. A Phylosian name is actually a sound, or series of sounds that serve to identify an individual similar to a coded signal that might identify someone to a computer system or system sensitive to auditory code or stimulus.

The Phylosian Voder translates these vibrations into "words" that are understandable to most people the Phylosians encounter, and the result becomes the individual's names.

Thus, a Phylosian might actually have many names, if they interact with a wide variety of individuals. But, usually, a Phylosians will have a consistently translated name, with the word-structure based on the most common language the individual Phylosian encounters.

HOMEWORLD

On the planet Phylos II, life took a rare turn that it hasn't on other worlds. There have been many planets where plants are the dominant form of life, but they also have animal life of some sort, even if it is at a primitive level of evolution. On Phylos II, for some undetermined reason, animal life never evolved beyond the bacterial level. In its place, plants had an open evolutionary environment to evolve into. They filled all of the ecological niches that the animals would have filled. This meant that there, plants would behave like animals, being both predator and prey, and appearing in various sizes. There would be aquatic forms, terrestrial forms, and even avian forms, such as the Phylosian swooper.

After initially evolving along plant-based lines, some life there began to show characteristics that would be attributed to animals on other worlds. Much of the plant life on Phylos II has evolved analogous botanical solutions to those evolved by animals on other worlds. Because it evolved from a plant-based origin, it took eons longer to evolve the same animal-based solution. The mobile plant life could have the same level of metabolism as some animal life, making them quite active. Some of the mobile plants even

evolved the ability to generate poisons to aid them in their predation, such as the retlaw.

Some of the plants began to grow appendages that would allow them to grab other nearby plants. They would also evolve the ability to digest plant matter in addition to still being able to photosynthesize. As these forms evolved, they were slowly gaining the ability to gain more varied forms of nutrition from their prey than they got from only photosynthesis. As a result, their capacity for photosynthesis was becoming vestigial. Eventually, some of them lost the ability completely. They even lost the ability to draw nutrients through the soil, allowing them to become more mobile. They were as close to animal life as evolution on Phylos II would allow it to become.

At some in the distant past, one form of life appeared on Phylos II. Like all of the other life there, it was plant-based. But, this one differed from the other life found there: it had the early stages of a rudimentary intelligence. It was able to avoid attacks more often by the predatory herbivores that roamed the planet. What initially started out as a simple reflex slowly became instincts, and then a primitive intelligence began to emerge. Like many of the other lifeforms there, it gained the ability to uproot itself and become mobile for short periods. As it evolved, these periods became longer. They would only root themselves into the ground to gain nutrients for reproduction and water.

This would free their minds up to start thinking about things other than survival. They gained their energy through photosynthesis, so this meant that they had no reason to hunt or gather. This allowed them to skip over many steps of evolution, both physical and cultural. They began to notice the stones lying around them, and realized that they could use these to defend themselves against the numerous predators. By becoming toolmakers, they were now at the level of Stone Age sentients, altering their environment to suit them. They would begin to domesticate some of the more controllable life to help them create their beginnings of their nascent civilization. They slowly began to breed other plants as tools, even getting them to exude substances they need, such as organic resins.

They would become experts at plant breeding before they even had a basic understanding of sciences. These would be considered the ancestors of the present day Phylosians. As they learned about botany, they also learned about genetics, and were soon incorporating some of these changes into their genome. This would include the ability to create very advanced chemicals within their own bodies, including the antidote to the poison generated by the retlaw plant.

They used to be only able to function during the days, when the sun was up. Once they created technology capable of generating artificial lighting, they were able to function continuously. Their technology is very non-polluting. They use base-14 mathematics. As they began to explore the local areas of space, they realized that they were surrounded by many hostile species. They decided to commit themselves to

becoming peacemakers, even if the other species didn't want it. They built a fleet of vessels to embark on this massive undertaking. And then fate intervened.

In theory, since they are plants, albeit substantially more complex ones, they could be cloned like other plants. In the 21st Century, they were forced to resort to this form of reproduction. They were accidentally exposed to MRSA, a gram-positive methicillin-resistant staphylococcus aureus strain. It was brought to Phylos II by Dr. Stavos Keniclius, an exiled Human with advanced expertise in cloning. He didn't realize he was a carrier for it, and had no clue that it would be so devastating to the Phylosians, who had never been exposed to this disease before. It rendered them sterile, and damaged their reproductive organs. They would now be forced to give up their dream of enforcing peace in exchange for surviving. Work continued by his later clones would reverse the damage done, and restored their reproductive capabilities. It would be generations before their population levels would even begin to approach their pre-Holocaust levels. They are being encouraged to reproduce sexually for the next few generations to broaden their genetic variation as much as possible, and to reproduce as often as safely as possible. This era becomes known as 'the Great Rebirth.'

FAVORED PROFESSION

Being pacifists, Phylosians will avoid the more aggressive, or combat-oriented professions such as Soldier, Weaponmaster, or Security Officer.

Phylosians excel as Science Officers, or as Engineering, or Operations personnel. They also make excellent physicians, due to their increased manual dexterity and ability to perform multiple tasks with their various limbs.

And, due to their psionic abilities, Phylosians can be trained to work as Ship's Counselors.

SPECIES ABILITIES

Psionic: All Phylosians begin with a Psionic attribute of 5 and also start the game with skill levels at +3 in both Telepathy and Empathy. They can advance their psionic attribute as a favored attribute, and both Telepathy and Empathy as professional skills.

Photosynthetic: Phylosians generate their own energy using a photosynthesis process very similar to the ability had by less sentient plantlife. They do not need to eat, or consume nourishment as humanoids do. But, they must recharge their energies using photosynthesis at least once a day or being suffering the same negative effects that a human or humanoid would suffer from hunger, and fatigue.

Bonus Edges:

Rapid Healing (as described on p.137 of the Player's Guide), due to their semi-regenerative cell structure.

Multitasking (due to their numerous, independently functioning limbs, and advanced intellect, Phylosians are able to perform several tasks at once)

Ambidextrous (It goes without saying that a Phylosian, with their greater number of limbs, suffer from no penalties from using an "off hand")

Species Flaw: Pacifist (although Phylosians enjoy practicing Martial Arts as a form of athletic competition, they are inherently non-violent, and will only fight when they think they are in danger or to defend themselves) Phylosians will have this flaw at level 2.