Return to Mithril

By Paul Drye

Introduction

When the Fifth Frontier War ended, the Sword Worlds Confederation lost half of its planets. Most joined the Border Worlds, but the Imperium took some for itself. Three of these were the "Metal Worlds," uninhabited planets reserved by the Sword Worlds for future development. When the Imperium took over, a decision was made to colonize them and help keep them loyal if another war broke out. The first inhabitants of Steel were placed in 1115, and the effort was successful -- Steel looks to continue growing for the foreseeable future. Mithril is the second world selected by the Ministry of Colonization, and groundbreaking personnel have been in place since early 1119. The first permanent inhabitants arrived, and the colony was formally founded, on 044-1120. This is the start of the fourth month of the 25-month Mithrilese calendar: the very beginning of spring.

The Planet

Mithril is a terrestrial world, orbiting a powerful F4V star. Unfortunately, Mithril orbits at a distance that gives it a low average surface temperature despite the heat of its primary. The ice caps are extensive, and even the equatorial lands have a climate like that of northern Scandinavia on Terra. Only the planet's 894-day year (758.6 Mithrilese days of 28 hours, 17 minutes) allows for a long enough growing season to support plant life. The local biosphere has adapted, and "ephemeral glades" containing a wide variety of plant and pseudo-insect species will grow and die over the course of a day or two when conditions are right. Surface gravity is 0.66G.

There are five continents, of which the largest is Lindmark -- the Sword Worlds' short-lived presence on Mithril was restricted to a small starport on the eastern end of this continent. Each pole sports a nearby landmass, Kvallmark in the north and Dagland in the south. Both are permanently buried in ice. To the southwest of Lindmark's eastern end is Manskara, while in the open ocean to the west is Vingmark.

Planet Data

Mithril (Sword Worlds/Spinward Marches 1628)

Starport: I

Diameter: 5,025 miles (8,086 kilometers). Gravity: 0.51. Atmosphere: Standard oxynitrogen. Surface Water: 83%. Climate: Very Cold. Population: 2,410 Government: Bureaucracy. Control Rating: 2. TL: 10 Gas Giants: 1. Trade Classifications: Lo, Ni

The Colony

While Mithril is cold and inhospitable on average, in a few places enough warming factors come together to allow taiga-like climates. At the western end of Lindmark is the largest of these areas, about 200,000 square kilometers (80,000 square miles) on the coasts of the Astafjord Gulf. Just a few degrees north of the equator and sheltered between two mountain ranges, the area is quite livable. For a third of the year -- from Ninemonth to Sixteenmonth -- the ground is clear of snow, and the length of the planet's year has let Mithril's ephemeral plant life evolve a permanent lifestyle. Within the warmer area, the larger plants live for years and convincingly impersonate conifer trees. When the time came to pick a colony site, Astafjord was the obvious choice.

Technically, Astafjord isn't a fjord at all, but rather the juncture of two tectonic plates, like the Terran Adriatic Sea. The mountains to the northeast and southwest of the gulf are volcanoes, mostly dormant. While there hasn't been an eruption since the colony was founded, several cones smoke away lazily. This suggested the names the colonists gave the ranges: the Cloudmakers for the high mountains in the north, and the smaller Mare's Tail Hills in the south. More importantly, the entire region is bursting with geothermal energy, which the colonists tap for cheap power.

Any rainfall or snowmelt runs down the side of these mountains, producing short, fast rivers that empty into the gulf. Southeast of the gulf's end, the ranges continue and their little rivers run into each other in the middle. There they aggregate into a considerable waterway, the Sestur River, which drains into the Astafjord. The town of Bryor is at the mouth of the river.

Bryor

Named after the decorated army hero of the Fifth Frontier War, Bryor is the only town on Mithril. 1200 people -- half the world's population -- live within a few miles of the town center.

As the first town on a new world, Bryor is different from most settlements in Imperial space. The Imperial Ministry of Colonization is emphasizing reliance upon local resources until Mithril can trade for what it needs. This means that Bryor is built around what the Astafjord has in abundance: trees, water, and geothermal energy.

Wood is the main construction material on Mithril. As it hasn't the strength of modern materials, most buildings are low to the ground -- two stories at most. They are quite rustic in appearance, with the high-peaked roofs characteristic of heavy-snow areas on any world. Cheaper buildings are built on A-frames, which makes them essentially nothing but roof. These buildings are inefficient, with space in the peak of the roof useful only for storage, but logs are cheap and there's no incentive to skimp on materials.

Inside, the buildings belie their log cabin facades. Thanks to stellar-era technology, they are properly insulated, appointed with running water, and powered and heated using heat pumps driven deep into the planet's crust.

The Colonists

Mithril's colonists are being recruited from developed worlds in the adjacent Lunion subsector, notably Adabicci, Persephone, and Lunion itself. A fraction of the population is from elsewhere in Lunion or further afield, brought in for their specialized skills. One aspect of Mithril's demographics is the complete lack of non-Imperial citizens; with the goal being to build a bulwark against the Sword Worlds, only Imperials may live on the world for more than 90 days consecutively. Sword Worlders are banned from visiting at all.

The day-to-day routine on Mithril is similar to that on any new, underpopulated world. A quarter of the inhabitants are engaged in full-time farming, supporting the remainder as they do their work. This is a large proportion of farmers for a modern world, but since the colony is presently too small to reap the benefits of economies of scale, it is necessary. Mithril's climate doesn't help either: despite genetic technology and many domesticated plant species to work with, the cold weather barely allows agriculture. Much farming has been moved into greenhouses on the edge of Bryor.

Fortunately the local biosphere is Human-compatible, and fishing employs about 10% of the population on three large industrialized vessels, the Queen of the Fjord, the Athene Bryor, and the Mother Carey. As well as harvesting the sea, these ships are sometimes used for surveying and researching Mithril's oceans.

On land, another 10% of the colonists are working full time for the Ministry of Colonization, either as an actual employee or as a contractor. These individuals are involved in surveying and evaluating the land. Many other colonists take part-time or limited-term contracts from the Ministry as well. While the entire planet has been mapped from low orbit, the level of detail is too low for many purposes. Much work remains to be done on the surface.

The last major job, and the one that takes the time of half the planet's people, is working on the colony's infrastructure. Building construction, roadwork, land clearance, and many other things are being done on a grand scale, with the goal of supporting 50,000 immigrants by mid-1124. Most of these efforts are run by private enterprises, which turn a profit from the new colonists as well as receiving concessions to some of the colony's resource rights.

Characters

Tsega Kayokono

Appointed Administrator of Mithril by the Ministry of Colonization, Kayokono is from Rabwhar in Lunion subsector. Since home is a tropical world, the Administrator is miserably unhappy with this freezing post, but sees it as necessary to advance his career. Outside, except in summer, he is invariably wrapped up in thick furs, a hat, and a long scarf that muffles his face and makes it difficult to understand what he says.

He stays inside most of the time with the temperature in his office set to 30 Celsius ($86\hat{A}^{\circ}$ Fahrenheit). He has jet-black skin and black hair in a crew cut. His most striking feature

is his red eyes -- a genetic defect sometimes found on Rabwhar. He is a competent administrator, though lacking in imagination, and spends much of the day juggling the priorities of the departments under him.

Ephraim Auberon

Captain of the fishing and research vessel Mother Carey, Auberon is a bear of a man, 196 centimeters (6'5") tall and 110 kilograms (243 pounds), with curly blond hair and a beard. He doesn't normally meet new hands right away, but makes a point of catching up with them in the mess during their first evening. He'll squint his eyes, then tell the tale of "a great white squid, big as a scout ship, that took me paw off at the wrist, and which I'll hunt down if it's the last thing I ever does." All the while he waves around his two obviously functional hands. The crew know this ritual and will play along until the captain takes pity on the swabbies, drops the act, and laughs uproariously while clapping them on the back hard enough to knock them overboard.

In fact, Auberon is a highly educated and cultured man, with an advanced degree in oceanography and a passion for Terran and Vilani maritime literature. The Captain Queeg routine is the only low humor he allows himself; otherwise he is careful and serious while underway, as befits someone traveling newly charted oceans.

Keeler Zumiru

One of the dozen children living in Bryor, and the only one of her age plus or minus a couple years, 11-year old Keeler has developed into a smart, sober, and solitary kid. A recent passion for paleontology has endeared her to many of the colony's scientists, who know her through her agronomist mother. Her father is a transport captain running Ministry of Colonization cargoes between Mithril and various destinations in Lunion subsector.

She's just started a growth spurt, and is conscious of this to the point of being awkward. The awkwardness disappears, however, when she's alone on her skis exploring rock outcrops for fossils, something no adult on the planet is studying. She has short brown hair in a bowl haircut and brown eyes, and often has a sunburn on her face except for where her ski goggles sit -- this has earned her the nickname "Raccoon." Not everyone is allowed to call her by her nickname, however.

Animal Encounters

Crystallice

A pseudo-insect found in the open plains or ice fields of Mithril, the crystallice are thankfully rare within the Astafjord's forests. Treat them as a swarm of crawling insects (p. B143), moving at 1, doing 1 hit per turn, and dispersed by 6 hits per hex. After the attack is over, 4d crystallice will be attached to the skin of anyone hit, and will have to be found and picked off before healing begins. This can be quite difficult to do on the ice fields, as the lice resemble tiny ice crystals.

Peurlin

ST: 18 Speed/Dodge: 16/8 Size: 2 hexes

DX: 14 PD/DR: 1/1 Mass: 400 lbs.

IQ: 5 Damage: Large Claws (1d cutting)

HT: 15/20 Reach: C

These solitary chasers are the most important predator in the Astafjord Gulf region. Covered in thick, gray fur, they are well adapted to their cold forests. Peurlins are long-legged and have powerful shoulders, the better to wade through snow; the overall effect is of a bulldog built on a giant scale, with a proportionately small, cat-like head topped with trumpet-shaped ears that fold back to save heat.

Adventures on Mithril

Fimbulwinter

The peurlins (see Animal Encounters above) will be a problem for the colony as they acquire a taste for Human meat. Several colonists will be attacked and killed, and carrying a firearm will be a necessity in the wilderness. The winter of the first year, hunting parties will be formed to kill the peurlins around Bryor. The adventurers will be drafted for this duty.

Over time, however, the peurlins will become a source of income for the colony. Their fur is handsome, particularly in the winter when it becomes snow-white and luxurious. Peurlin fur shipped to nearby worlds will sell well. Unless protected, the peurlins will be hunted to extinction, and the players may end up defending their onetime quarry.

Innocent Abroad

A surprise late spring blizzard has clamped down on the Astafjord, and all expeditions have had to return to Bryor until it blows over. All personnel are accounted for, except for one unofficial scientist: Keeler Zumiru. She has radioed in to report that she was caught in a small avalanche about 15 kilometers (9.3 miles) southwest of town. While unhurt, she has lost her skis. Ever-conscientious, she has dressed warmly and packed emergency survival gear (including the radio she is using), but she won't make it through the night. Someone needs to pinpoint her and get her home. With the weather as it is, an air/raft is out of the question. When she is found, an additional complication arises: she's got about 30 kilograms (66 pounds) of specimens from a mother lode of fossils that she's found just that day, loaded on a sled -- and she will not abandon it. The players need to figure out how to get it back, or at least convince her that they can reliably retrieve it after the storm is over. Strong-arming her gains an 11-year old enemy and the disapproval of the colonists (who rationally understand the necessity, but dote on Keeler.)

Mithril's Secret

As a supplement to the adventures above, and any a GM might concoct, the following adventure nuggets supply a "story arc" to a longer series of gaming sessions based around Mithril. While they are not intended to be played back-to-back, running them in order will lead the players towards an important discovery: the existence and ultimate fate of two previous colonies on Mithril, and how this affects the success of their own.

The Aslan Chasm

There are hints of prior habitation on Mithril. More than a decade ago a cursory survey of the planet by the crew of the IISS ship Central Axis discovered a few long-abandoned roads of unknown origin. More extraordinary, however, was the so-called "Aslan Chasm," a remarkable artifact more than five kilometers long and 1500 meters deep. The purpose of the huge cutting is also unknown, but the images carved on the walls revealed that the chasm was of Aslan manufacture.

This is of considerable interest to scholars specializing in the history of that species, as the Aslan didn't cross the Great Rift to rimward until a thousand years before the founding of the Imperium. Since the chasm is no less than 1800 years old, it is the earliest known sign of the Aslan in the Marches.

As part of the endless researching and surveying in the colony, the adventuring group are contracted by the Administrator to explore and map the chasm. It's more than 1600 kilometers (1000 miles) west-southwest of Bryor, and an air/raft will be necessary. Either the surveyors can provide their own, or they can use one supplied by the Ministry. In either case, the air/raft will be temporarily outfitted with a laser range finder and a densitometer, and holorecording equipment will be supplied. Equipment given to the group will clearly have seen heavy use, but will be in good working order.

If the players stop to do some research on the chasm before leaving, they will find that the best source of information on the site is an article in the Spinward Marches Archaeological Review, an obscure scholarly journal. One Professor Elke Ragnarsdottir had an opportunity to study the Aslan remains in 1107, and published her findings in the Review. The article was then included in the database of information on Mithril that was given to the colonists when they came to the world. While the paper is quite technical, a useful map of the site is included.

The bottom of the chasm is covered by the rocky detritus of two thousand years; cycles of freezing and thawing have broken off literally millions of tons of stone from the chasm walls. On average, there is 5 meters (16 feet) of debris on the floor of the chasm, though this varies from place to place. At a variety of points in the chasm there are entrances to large halls, but all are at the bottom, buried in debris, and can be found only by using the densitometer. If one is opened, the investigators will find a variety of Aslan artifacts. Near the back of one hall is a large pit cut into the rock and used as a garbage dump. Within, they will find Human skeletons wearing heavy iron chains. There is no record of Human presence on Mithril 1800 years ago.

The Cylinders and the Ship

Dr. Ragnarsdottir, the author of the only existing paper on the chasm, has been watching Mithril since the end of the Fifth Frontier War. A Sword Worlder, she has been frustrated by her inability to get a travel visa from the Imperium so that she can continue her studies. When the characters' discoveries in the Aslan Chasm come to her attention (they were mentioned fleetingly on the wire services, but Elke is paying close attention for items about Mithril), she will contact them via Xboat message and point them in a related direction.

The Doctor is a wizened old woman, with white hair that falls past her ears, and thick glasses that make her eyes look half their actual size. When the group plays her message, she will be seated in a small study, piled improbably high with books. She will clear her throat, blink a few times, then say:

"Hello. My name is Elke Ragnarsdottir, and I am a professor of archaeology at the University of Sacnoth. I recently heard of your exploits in the Aslan Chasm, and I wanted to speak with you."

"I've been studying the Aslan presence on Mithril for many years now, and the Human skeletons you discovered may help clear up something that has been puzzling me for some time. I recently came into possession of some artifacts retrieved by an Imperial ship on Mithril years ago. They are, apparently, nuclear fuel cylinders of a type I've never seen before -- certainly not Aslan -- and I had not been able to guess where they came from. Now you have turned up a new group that once lived on the planet. I trust you can see the connection. The Imperium has been keeping me from returning to Mithril for nearly fifteen years now, so I would like to ask you to investigate something for me."

Doctor Ragnarsdottir points the party in the direction of the archaeological site where the cylinders were discovered: on Vingmark, 7000 kilometers (4400 miles) due west of Bryor, about a third of the way around the planet. This is another region where the native ephemerals have evolved a more permanent style of life, and though much smaller than the Astafjord, the site where the cylinders were found is covered with deep forest.

The problem for the players is to find the site. When all the cylinders were removed, the background radiation that initially drew attention to the spot started to fade, and now all the party will have to work with is an area of higher particle counts that is 10 kilometers (6 miles) in diameter, and irregularly shaped due to local wind and water patterns.

When the PCs do track down the site, they will find evidence of a small settlement, long abandoned, 500 meters (550 yards) from where the cylinders were found. It is large enough to house several hundred people. It is composed of a strange mixture of low-tech local materials and scavenged items of stellar tech. Unloading the densitometer again will reveal the outlines of a large ship of unknown design, buried several meters under ground. It has been there long enough to be covered up like this by natural processes; to reach it will take heavy digging equipment that the investigators don't have.

"What We Have Here Is a Regular Darrian Standoff"

Some time after discovering the buried ship, the players will be given an opportunity to return to Vingmark. The mayor has been tipped off that two Sword Worlders have slipped onto Mithril and are headed out to that continent for reasons unknown; undoubtedly it's not good. They are using the aliases Eneri Reichenau and Ngi Jumeri, and passed through Bryor en route to Vingmark less than 24 hours before. The PCs are the only colonists familiar with Vingmark who are not already on assignment elsewhere, so they're drafted to track the Sword Worlders down.

The two Sword Worlders not just headed for Vingmark; they're on a beeline for the buried ship. The party's knowledge of its location should let them catch up with their quarry just as they get to it.

The pair are up to something, but not what the players might believe. In fact, Eneri Reichenau is with Imperial Intelligence, and Ngi Jumeri is a Darrian operative working under an assumed name. If captured by the players, Jumeri can prove their claims simply by lifting his long hair and displaying the characteristic Darrian pointed ears.

Both will refuse to explain their mission, until the players' intelligence comes back to bite them. There are two Sword Worlders on Mithril, and they get to the ship site a few minutes after the PCs meet up with the intelligence officers. Depending on how things have been going, a three-cornered fire fight may break out, or the Sword Worlders may be up against united opposition. Fortunately for them, they're still in the air and in an armed air/raft.

If the situation is resolved favorably, the story behind all this can be obtained from the defeated Sword Worlders, or from the now more friendly intelligence agents. The buried ship is of Maghiz-era Darrian construction, and the Imperium and its small ally have been looking at the discovery of shackled Human skeletons in the Aslan Chasm with some concern. The Darrian Confederation depends on the good relations between its Human and Aslan citizens, which suffer if it became known that the first contact between the two races resulted in warfare and slavery. The situation needs investigating. The Sword Worlds have come to the same conclusion, and sent a team to try and recover some damning evidence.

Reichenau and Jumeri have brought some portable earth-moving equipment with them. It will take about eight hours to clear away enough dirt to get into the ship (the Darrian has plans of the ancient craft, showing the airlocks), after which the wreck can be explored. Logs will be found, that tell the story outlined below.

The Aslan and Darrian Colonies

Mithril's first permanent inhabitants were Aslan. A tiny clan named the Hlealiyia fell under the sway of a new religion. Liquidating their assets, the embarked on the Eayoiya, a trek far to coreward from their home in Uistilao sector.

In -905, the Nuyiseh, a jump-3 Darrian liner, entered the Mithril system. The Maghiz had just finished wrecking Darrian space, and the cruise ship was refitted, recrewed, and

charged with evacuating several unsustainable Darrian outposts. After three other rescue missions, they were repatriating 800 people from Caladbolg when disaster struck. Spare parts and maintenance were in short supply after the disaster, and the Nuyiseh was in bad shape. She misjumped, and upon re-emerging into normal space, found herself at Mithril with the drive and other systems wrecked. With no hope of repair or rescue, the crew and evacuees colonized the world out of desperation. They managed to get the ship down reasonably intact, and made it the center of their colony.

They also made contact with the Aslan building the chasm. Things did not go well. The Hlealiyia had gone on their trek to get away from the rest of the universe, and here were some of those aliens that their species had been fighting on the Trailing border of the Hierate for centuries. The contact team was captured and enslaved, and the Aslan tried to eradicate the Darrians from Mithril. The war lasted twenty-five years, with the outnumbered but higher-tech Darrians just holding off the Aslan. However, one year the Aslan simply stopped attacking. Cautious investigations found that they had all died over the course of one winter, apparently of a plague.

Freed from their main worry, the Darrians set about colonizing Vingmark, and did so for a century. Shortly after this time, however, the colony went into steep decline. The logs stop in -760.

The Culprit

The previous colonies failed because of the crystallice, the tiny biting "insects" that are the bane of treks to the Mithrilese wilderness.

Normally, the Imperial Ministry of Colonization takes a close look at the ecology of newly opened planets, watching for anything that could adversely affect Humans. This hasn't happened here in the hurry to get Mithril built up before hostilities break out again. For lack of time and resources, no-one has seriously studies the crystallice, until the players prompt others to start looking for the source of the plague. Upon examination, it will become apparent that they are not animals at all, but rather an unusual life form that will be dubbed "Mithrilese megavirus".

While they are autonomous creatures like animals, in the sense that they have recognizable organs and body parts, crystallice reproduce in a way more like viruses than anything else. When one bites, as well as sucking some blood for food, a crystallouse also injects a "reproducer". The swelling and sharp pain produced by a bite is a side effect of a Human's immune response to the reproducer.

In Mithrilese animals, the reproducer overwrites the DNA of cells near the injection site, forcing the corrupted cells to generate more reproducers, which spread through the body corrupting more cells. Eventually the entire creature is compromised and dies. At this point, the rewritten DNA follows its second set of instructions: waiting for the right conditions to form the next stage of the crystallice's life cycle, one type of "plant" in an ephemeral glade. The ephemeral eventually grows and blooms, becoming a factory for more crystallice during its brief existence, and the cycle begins again.

Mithrilese life has evolved appropriate defenses against this insidious attack, only

succumbing when sick or injured. Humans (and other off-world species) have not, but the vast differences between the coding of off-world life's DNA and Mithrilese DNA keeps reproducers from spreading through a Human's body. Instead, the reproducers usually end up overwriting useless "intron" DNA and have no effect. Occasionally though, one will hit an important gene; each bite from a crystallouse runs the risk of inducing a cancer sometime later in life. Both the Darrian and Aslan colonies failed to thrive because of soaring rates of sickness.

Having non-Mithrilese DNA can only defend for awhile, though. There are trillions of crystallice in every generation, with countless strains developing each year and pecking away at the interlopers. By sheer chance, within a few hundred years one is almost bound to hit on a combination which lets the reproducers spread. While this is still not enough to allow for the complex transformation into an ephemeral seed to occur, it does allow the overwritten sections of DNA to spread to the infected host's reproductive cells. At this point the colony collapses, as no more children are born.

The Outcome

If the PCs discover the megaviruses, the colony is saved. While many colonists are already infected, it will not be very difficult to reverse the damage inflicted on their cells. The previous two colonies were cut off from interstellar society, but the present one is not, and it will take characters with medical skill (or failing that, doctors at the University of Regina) six months to produce an injectable treatment. From then on, treatment for crystallouse bites will be incorporated into Mithril's medical examinations.

If the megavirus is not discovered within two years, the crisis will hit the colony far sooner than might be expected. The crystallice have encountered Human DNA once before -- with the Darrian colony -- and the strain that "solved" it still lives in the wilderness. As soon as it discovers its prey, colonists will begin falling sick.

"For Service Above and Beyond"

As a new colony, Mithril needs some nobility. If the GM wants to run more political adventures, he may want to grant the peerages to the colonists that saved a strategic colony from certain doom (especially if they also produced an elegant solution to the Darrian/Aslan scandal -- the Confederation is an ally, after all). Appointments to the lowest echelon of the nobility would be sufficient, and the newly-created knights would not be the planetary rulers, merely landholders. As underpopulated as Mithril is now, the perquisite levels of power and income will be small; if anything, Mithril will be a money sink for its nobility for some time. And there is almost certainly a noble elsewhere in the Marches who expected to receive the post, and is unhappy with his new peers . . .