Ghostwriting Plants

Hi Flint! Here is your plants file. This ecosystem has been developed with three criteria in mind, specific to the ris'wars' world, that:

- 1. most of the plants will live in, or near saltwater,
- 2. the water they live in will be shallow, and
- 3. areas of high altitude are rare.

Everything you see on this file is the result of 4 hours of work, and there's lots more I could do, so as such there's a certain amount of 'scaffolding' present on this file. Anything behind a black marker is a note that helps me to structure the ecosystem. I've kept them in, just in case you want to keep working on this world, so I can continue with relative ease; they're not confidential, they're just not the actual finished work. You're more than welcome to check them out if you like.

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There is more plant-work I can do, and I'll be happy to create Orders for the other four Classes, but at this point you have a full set of descriptive Orders, which should be enough for Mike to work with to make your map, and several saltwater plants, so I think this work, though incomplete, gives you what you were looking for.

"Planet Ris'War" Class Characteristics

On Earth, there are several taxonomic Classes of plants: algae, conifers, ferns, gingko, flowering plants, horsetails, liverworts, and mosses. I've created 6 for you, which each have their own names and overall sets of characteristics. These provide you, and me, with an overview of the ecosystem.

<u>Bowchna</u>			

Marine plants in this Class are the most common, with only a few freshwater species.

Bowchna produce cones which can easily detach, especially in strong tides/waves, and be carried a long distance away. While some cones will fetch up against the land and grow into plants quickly, others remain free-floating for far longer. These grow roots that trail in the water and pick up nutrients from there, plus stems which bob and sway with the turbulent water like buoys.

Their leaves are often long, thin, bendy needles, and often blue-ish as they're covered with a waterproof wax to protect them from the salt water. Some are very short and evolved to be too short to be caught by the fast-moving water, so some plants have nothing more than bumps or green-blue discs running up their stems.

Bowchna play a big role in oxygenating the water, especially younger plants as these are more mobile.

Some species are poisonous, enough so that extended contact with them will kill other plants and some species of animal. This leads to natural monocultures of these plants.



<u>Snelgroen</u>

Snelgroen are known on the ris'wars' world for being tough, as they are most noticeable in environments that other plants struggle to tolerate: dry and relatively high-altitude areas. As there aren't many areas fitting that description, Snelgroen are also generally not very well known.

They have adapted to survive on volcanic slopes so are fast-growing. For this reason they tend to be short, mostly 'green' (ie., no thick trunks), and they don't waste energy producing fruit. Instead they mainly produce spores that grow on their leaves, creating interesting stripey patterns on some species, and which blow away on the wind or tumble downhill. A few species do produce fruit, but these are small, mean fruits compared with some other taxonomic Classes.



Plants that grow low to the ground in spongy clumps. They often play a role in reclaiming bare land: for this reason they are usually the first plants to regrow on the scene of any recent volcanic activity.

They don't produce roots but they do cover large expanses of ground, which helps them protect the soil from eroding by soaking up rainwater before it can wash the soil away.

Vreg produce spores, although these are unnoticeable to most living beings, especially since they're likely to spread by being carried in water.

In addition to protecting the soil, the holes in these plant 'sponges' provide space for animals to live. They're also bright and luminous in colour much of the time, and are the source for a variety of medicines.



<u>Drugeweeds</u>

Drugeweeds overwhelmingly live on dry land.

They produce spores which they distribute with the help of animals, which they attract by producing pseudo-fruits, usually small ones. The animals get spores on their fur or skin, which they then distribute when they leave. For this reason many of these plants grow around the entrances to the burrows of such animals, which helps those animals to live more safely as their burrow entrances are camouflaged.



Slaw plants often create symbiotic relationships with other life, especially bacteria and fungi. This makes them highly adaptable to the extent that often, they don't appear to be plants at all - they can grow over rocks in all environments from fresh and salt water to open land to the highest mountains and hills. However, they tend to grow slowly so aren't seen on volcanic slopes.

They usually reproduce via spores or cell division, usually asexually, which helps them spread faster, partially mitigating their slow growth.

Their adaptability to live underwater makes them effective oxygenators of the water, and they are known to produce a wide range of raw materials for medicines.



Stenclan

Low-growing plants that play a big role in stabilising the environments in which they grow. They soak up water and release it slowly, which keeps the soil beneath them damp enough to allow other plants to grow. Stenclan also protect the ground from harsh sunlight which also helps young seedlings of other plants to grow.

They produce fruits and nuts, invariably small ones, and are the only plants that reproduce using flowers (generally as these flowers are small they are visually striking: white, yellow, and ultraviolet are common colours, along with dark leaves to aid their contrast. Flowers grow in clusters to aid the flowers being seen from a distance, and they produce a wide range of scents including ones that mimic rotting meat, or the pheromones of insects and small land animals).

Environments with lots of stenclan (and it's rare for it to be present in small quantities) are often humid. As these plants can't hope to compete with the very plants they support by stabilising the soil, they often grow up the trunks/stems of snelgroen and drugeweeds wherever tall species within those Classes are common, although in most environments this presents little to no problem.



"Planet Ris'War" Order Characteristics

In taxonomy an "Order" is a group of species which are closely related and often have a certain number of characteristics in common (e.g., birds of prey, sharks and rays, primates, etc.) Each Class contains multiple Orders, so the following is a list of Orders and a broad description of each.

I haven't come up with 'proper' names for each species as that's particularly time-consuming, but they do have temporary names.

Bowchna

Crown plants [Name TBC]

Plant type: Shrub

Description: A crown of curved cones grows from the centre of these plants to help keep them stable in rough waters. Medium-size plant so most of its weight remains low.

Disc plants [Name TBC]

Plant type: Creeper

Description: Many of these plants are almost flat. They grow along the surface of the water and are flexible enough to absorb much of the power in the waves that wash over them. Water rolls off their cones, which they only release only when they're very ripe and a wave rolling over them is enough to dislodge them. Dozens to hundreds of cones grow in a cluster at the centre of the plant's cone-discs.

Freshwater trees [Name TBC]

Plant type: Tree

Description: Primitive looking plants with woody trunks and soft leaves. These tend to be freshwater trees - they're a bit tender to tolerate salt water and harsh tides. They are also far more likely to successfully anchor into soil so they're less well known for being free-floating, even though they technically can when they're young.

<u>Trailing roots-and-tendrils plants</u> [Name TBC]

Plant type: Climber

Description: Relatively large plants which grow extensively over the ocean's surface and latch onto anything they can to climb upwards - rocks and cliffs being ideal, but beaches will do. Their roots trail a long way down, plus they lay tendrils down into the waters to sense soil and objects they can anchor onto. On calm days they can stay still for long enough for their roots to take hold.

Fat-root plants [Name TBC]

Plant type: Herb

Description: These plants are able to produce a fat root, but only if they can reach a rich enough source of nutrients, and that usually means growing on land. Their cones are brightly coloured which helps get the attention of animals, which are then more likely to grab them and carry them away from the parent plant.

Hemisphere plants [Name TBC]

Plant type: Shrub

Description: A plant that relies on its broad leaves to keep it afloat. As such, this plant's leaves form a semi-spherical shape which makes it almost impossible to capsize. Its cones are hidden deep within its leaves and are only released in the roughest waters. As they are woody-stemmed, dead plants form 'crowns' of driftwood.

Pretty cone plants [Name TBC]

Plant type: Creeper

Description: Another creeping plant, this one produces elaborate cones that only a small number of species can raid for their seeds.

<u>Snelgroen</u>

Mangrove tree [Name TBC]

Plant type: Tree.

Description: A specialist that grows where volcanoes have emptied into the ocean. It thrives in shallow saltwater where it can benefit from the sun's warmth. Some species can grow in similar fashion in fresh water, although the saltwater species are much better known.

Sweet scent plant [Name TBC]

Plant type: Climber

Description: A climbing plant which produces spores that are carried on the breeze. They generate a breeze by attracting species who appreciate the scent or associate their scent with foods - rotting meat, sweet or fruity smells, etc. - and being carried on the vortexes created by animals visiting in search of food.

Pick-and-run plant [Name TBC]

Plant type: Herb

Description: A fast-growing green plant with succulent leaves. It attracts animals by producing a sweet sap which it sweats through its leaves. As the leaves are tender and inoffensive to eat, and as this plant grows on volcanic slopes which are often made of loose soil, this means the plant can be picked out of the ground and carried away by any animal seeking to get away from the ominous volcano before eating. This in turn means that even if an eruption happens, the plant won't be incinerated, nor its spores.

Peaceful shrubs [Name TBC]

Plant type: Shrub

Description: Grows at the edges of volcanic land where the ashes rarely reach. This grants the plant enough safety to live out its life-cycle of several years.

Stripe-plant [Name TBC]

Plant type: Creeper.

Description: A vulnerable plant which grows along the ground with incredible speed. When a person looks through its leaves at the light its spores become easily visible, and these are often arranged in herringbone patterns. The plant focuses on producing spores in order to create the next generation as a matter of urgency due to its vulnerability to environmental problems such as sub-zero temperatures and lava.

Ancient trees [Name TBC]

Plant type: Tree

Description: Much like the above shrub, but a tree version. It grows with relative speed and has a simple structure, meaning it can reach an age where it produces spores that much faster, should the worst happen, but if they are allowed to live out their whole lives they can remain in situ for hundreds of years.

Sky-seeking plants [Name TBC]

Plant type: Climber

Description: These plants usually start life at the bottom of rocks, volcanic slopes, and other tall geological features, and instinctively grow upwards in search of warmth and sunlight. If allowed to grow old enough they begin seeping sap, which can be collected and used as a sweet-smelling resin. It is also one of the few species in this Class to produce fruits.

This is where I ran out of time!

1. Vreg

- a. Apiales variable, e.g., Carrots, celery, parsley, ivy
- b. Brassicales variable, e.g., Cabbages, mustards, papaya, capers, nasturtiums, radish, beetroot
- c. Cornales Flowers have four separate petals, fruits are fleshy, most plants are woody. No examples
- d. Ericales Showy flowers, often 5-petalled, e.g., Tea, blueberry, brazil nut, azalea, kiwi fruit, rhodedendron, heather
- e. Geraniales 5-petalled flowers. No examples
- f. Malpighiales One of the largest orders. Toothed leaves, e.g., Willow, violet, poinsietta, coca plant, passionfruit
- g. Piperales Tiny, densely packed flowers with no petals, e.g., Black pepper
- h. Saxifragales variable, e.g., Peony

2. <u>Drugeweeds</u>

- a. Aquifoliales variable, e.g., Holly
- b. Buxales Shrubs and trees. Good source of ornamental plants and trees. Male flowers are distinct from one female, e.g., Common box
- c. Crossosomatales Tube-shaped flowers. No examples
- d. Euphorbiales variable, e.g., Rubber tree
- e. Gunnerales varible, e.g., Gunnera
- f. Malvaceae various, e.g., Balsa, cacao, kola, baobab, cotton, rafflesia flower, passion flower
- g. Poales Small flowers, single seed leaf, rely on wind pollination, e.g., Grasses, wheat, bullrush, bamboo, bromeliad
- h. Solanales variable, e.g., Aubergine/eggplant, potato, tomato, belladonna, chilli pepper, tobacco, sweet potato, morning glory

3. Slaw plants

- a. Arecales variable, e.g., Palm tree, coconut, acai
- b. Caryophyllales Many are succulents, e.g., Cacti, carnations, spinach, beets, Venus fly traps, rhubarb, sundews, purslane
- c. Cucurbitales Mostly tropical, e.g., Gourds, squashes, pumpkins, melons, cucumber
- d. Fabales Plants produce pods, e.g., Legumes, kudzu, four-leaf clover, wisteria, acacia
- e. Lamiales variable, e.g., Lavender, lilac, olive, jasmine, ash tree, teak, snapdragon, sesame, sage, mint, basil, rosemary, blue jacaranda
- f. Myrtales These plants prefer a warmer climate, e.g., Pomegranates, Fuschia, eucalyptus tree
- g. Ranunculales variable, e.g., Buttercup, poppy, bleeding heart
- h. Trochodendraceae Flowers have no petals and no scent. No examples

4. Stenclan

- Asparagales Tight rosettes of leaves are common, e.g., Onion, garlic, leek, asparagus, saffron croci, aloe vera, iris, orchids, daffodils, bluebell, spider plant
- b. Dilleniales Tropical and subtropical. No examples
- c. Fagales Contains some of the best known trees in the world. No distinct description, e.g., Birch, beech, walnut
- d. Laurales Tropical and subtropical, mostly trees and shrubs, e.g., Cinnamon, avocado
- e. Rosales Petals are separate from one another, few other details about the characteristics of the flowers, e.g., Rose, strawberry, blackberry, raspberry, apple, pear, plum, peach, apricot, almond, fig, nettle, hop, cannabis, ficus
- f. Vitaceae Woody, mostly tendril-bearing vines. Some plants are parasitic, e.g., Grapes