



GREEN GUARDIANS

Green Guardians

Use Resources Wisely - Overcome Disasters - Save Your Friends

Ages: 10+

Players: 2-4

Time: 45-60 mins

The Story

You are Green Guardians seeking prosperity in a new land. While exploring your surroundings, you learn this new environment provides you with a bounty of resources, but also poses many dangers. You find that each of your actions affect your environment just as your environment affects you, sometimes in unexpected ways. You must choose how to achieve your goals without upsetting the natural balance of your new home. Will your choices bring prosperity, or will your pursuit make your world into a polluted wasteland?

Overview

The goal for the Green Guardians is to overcome disasters that stem from extracting natural resources for development. Exploring this new land, you gather resources to improve production and research abilities. Each action exposes you to the risk of disasters and pollution that hinders your progress. Learn about the trade-offs between the beneficial uses of natural resources and the creation of waste before it's too late.

Contents

- 19 hexagonal terrain tiles: 4 plains, 4 forests, 4 oceans, 4 mountains, 3 deserts;
- 85 resource cards: 10 single, 5 double, and 2 triple value each for air, animal, earth, plant, and water;
- 15 unique disaster cards: 1 each of 3 classes from the 5 resource types;
- 8 unique breakthrough cards;
- 1 tree of knowledge (box bottom);
- 40 waste & pollution 2-sided tokens;
- 24 workshop & laboratory (lab) building 2-sided tokens;
- 52 research tokens;
- 4 Green Guardians wooden tokens;
- 1 6-sided die;
- 1 rule book.

Set-up



The board is made up of interchangeable hexagonal terrain tiles. For 2 Guardians, select 3 oceans, 3 plains, and 2 of all other terrain tiles (12 total) and put away the remaining tiles (1 desert, 1 ocean, 1 plains, 2 forests, 2 mountains) that will not be needed for this game. For 3-4 Guardians use all 19 terrain tiles.

Shuffle the tiles and place them randomly, **face down**, in the shape below:

2-Guardian setup:



3-4 Guardians setup:



Sort the resource and corresponding disaster cards by resource (such as air, animal, etc. that have the same backing). Shuffle disaster cards in with each resource type. Place resource and disaster cards face-down in stockpiles. Leave space for discard piles next to each stockpile. For each stockpile, as soon as it is empty during play, shuffle the discard pile to refill.

Place the tree of knowledge next to the terrain tiles. The tree of knowledge is common to all Guardians and used for tracking Guardians' progress researching toward breakthroughs. Place breakthrough cards next to the tree of knowledge until earned by Guardians. Set the waste and pollution tokens on the side of the board, ready for use when created by the Guardians actions. Each Guardian takes your color-coded set of Guardian token, workshop & lab tokens and research tokens. Leftover sets are put away and will not be needed for the game.

Gameplay

The oldest Guardian goes first and play proceeds clockwise. Each turn consists of up to 4 phases. Phase 1 is the only required phase. Guardians can choose either Phase 2A or Phase 2B actions. If an action in Phase 2 is chosen, then Phase 3 is triggered. Phase 4 is always optional.



Game action follows two general rules: actions must be where a Guardian or building is present, and actions in terrain require resources from that terrain. **Prosperity Points** are earned by researching breakthroughs and overcoming disasters. **Play continues until the first Guardian to earn 10 Prosperity Points wins, or Guardians are unable to act due to insufficient resources and pollution.**

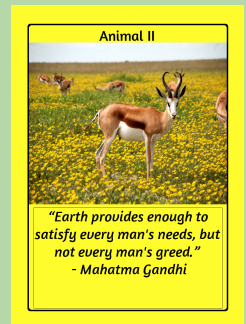


Phase 1: Move, Gather, Disaster!

Move & Gather

Begin your first turn by moving your Guardian onto any edge tile. On subsequent turns, you may move to any one adjacent tile each turn. You may share a space with other Guardians and buildings.

If you move your token to an unexplored (face-down) tile, the tile is revealed (placed face-up)



in the same location. You collect 1 of each resource according to the terrain type, these are considered received simultaneously so drawing a disaster does not prevent drawing the second resource. Resource cards can be valued at 1, 2 or 3. At no time is change given for resource values.

Terrain\ \Resource	Water	Earth	Plant	Animal	Air
Ocean	1			1	
Plains			1	1	
Mountain	1	1			
Forest			1		1
Desert		1			1

If you remain on or move to a revealed (face-up) tile, you may gather 1 resource of your choice according to the terrain type (See Resources section), unless there is pollution.

Disaster!

If you draw a disaster card from the resource pile, you reveal the disaster as a challenge for the Guardians to overcome. There are 3 levels of disaster from the least severe Class 1 to the most severe Class 3. All disasters

create 1 local pollution immediately, unless overcome with the Resilience knowledge (see Tree of Knowledge for details). But disasters also subject the Guardians to potential

The diagram illustrates a disaster card with the following components:

- Disaster type:** Water Disaster: Class III
- Resources to Successfully Overcome the Disaster = # of Guardians + number indicated:** GG + 3
- External Pollution:** Three radiation warning symbols (☠️).
- Prosperity Points:** Three smiley face symbols (😊😊😊).
- Disaster description:** Aral Sea. Once the 4th largest lake at 68,000 km², lost 90% since the 1960's after the rivers that fed it were diverted by Soviet irrigation projects.

additional pollution if they are not overcome using resources. Guardians simultaneously offer bids of resources to assist in overcoming the disaster.

If the Guardians are successful, the highest bidder receives the corresponding Prosperity Point(s), marked by placing Prosperity Point tiles in the Guardian's play area. Ties go to the Guardian who drew the card. All bid resources are discarded.

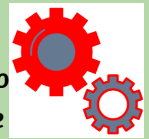
If the Guardians are unsuccessful, the number of external pollution tokens indicated are stored on the disaster card alongside the board. At the start of each subsequent turn, move 1 external pollution from the disaster card to the game board in the same manner as external waste (See Placing External Waste in Phase 3). When the last pollution is placed on the board, discard the disaster.

Phase 2A. Build and Upgrade

You may build and/or upgrade multiple buildings in this Phase. If you build or upgrade, you may not produce or research from buildings.

Build

To build a **workshop**, invest 1 resource that is from the target terrain type. Discard the resource card and place the workshop token on the terrain tile. You may build a workshop at the tile your token is on. You may not build on a tile where another Guardian's token or building is present. You may build on a tile with waste but not on a tile with pollution.



Upgrade

To upgrade a workshop to a **lab**, invest 2 resources that are from the target terrain type. Discard resource cards and flip the workshop token over to the lab side. You may upgrade any number of your workshops to labs. You may upgrade on a tile with waste but not on a tile with pollution. You may upgrade a workshop the same turn it is built, but both steps are required and create waste (see Phase 3).



Phase 2B. Produce and Research

You may produce and/or research from multiple buildings this Phase. If you produce or research, you may not build or upgrade buildings.

Produce

Draw resources for each of the selected buildings. You may produce resources at any number of buildings you own, except they must not be on polluted terrain. Workshops produce 1 resource of your choice according to the terrain type. Labs produce 2 resources, 1 of each according to the terrain type.

Research

Place one **research token** from your stockpile on each of the selected buildings. You may research at any number of labs you own, except they must not be on polluted terrain. Labs can produce 2 resources or create 1 research per turn, but not both. Research tokens are kept on the lab building until used for learning or cleaning (Phase 4) and do not have to be used the same turn.



Phase 3. Waste and Pollution

Place **waste tokens** on tiles for each act of building, upgrading, producing and researching. Waste can be either local, meaning on the tile of the action, or external, meaning a tile adjacent to the tile of action. Waste is still placed even if a disaster card is drawn when producing. When a tile reaches 3 waste, the waste tokens are replaced by 1 **pollution token**. No additional waste or pollution is added to a polluted tile.



Place waste:

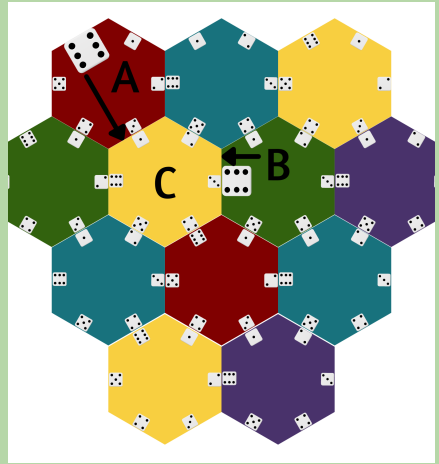
- ...for building: 1 local waste;
- ...for upgrading: 1 local & 1 external waste;
- ...for production: 1 external waste;
- ...for research: 2 external waste.



The external wastes are assigned by 2 different rolls of the die, so it is possible but not automatic that both waste will end up on the same tile.

Placing External Waste

Assign external waste or pollution by rolling the die. Each hexagonal tile is marked with a number 1-6 on each side corresponding to the die. Waste tokens are placed on the adjacent tile in the direction whose number is rolled. If the number rolled indicates an edge with no adjacent tile, waste is placed in the opposite direction. If the roll indicates a tile that is already polluted would receive waste, that waste is not added and no re-roll is necessary.



See example figure for placing external waste: For actions at both locations A & B, the roll of 6 would mean placing waste at tile C.

Phase 4. Learn and Clean

Learn

You may earn a research token by investing 3 resources. You may earn multiple research each turn. Research tokens are placed on a lab building if one exists, or at your Guardian location if not, until used for learning or cleaning (Phase 4) and do not have to be used the same turn. Research can be used to learn resilience, knowledge and eventually breakthroughs, marked by placing the research token on the Tree of Knowledge.

Clean

To clean up waste or pollution, invest 3 resources or 1 research. You may clean up waste or pollution from any tile with your building or Guardian token.

End of turn. Play continues to the next Guardian seated clockwise.

Tree of Knowledge

The Tree of Knowledge is where you mark your learning progress.

Resilience allows you to invest one resource to overcome immediate local pollution caused by a disaster. **Breakthroughs** earn you special abilities and Prosperity Points as described on the table below and respective cards.

You learn resilience, knowledge and breakthroughs using any research or 3 resources. Once research is applied to the Tree of Knowledge, you cannot undo or move the research token once played.

There are three levels on the Tree of Knowledge: resilience, knowledge, and breakthroughs. Resilience and knowledge are prerequisites to other knowledge and breakthroughs. Resilience and knowledge can be learned by more than one Guardian. A breakthrough can only be learned by one Guardian, after they have learned all of its prerequisite resilience and knowledge.

Resilience	Knowledge		Breakthroughs	Pts
Waste Collection (Animal)	Recycling	Holistic Design	Wind Power	3
	Sanitation	Treatment	Potable Reuse	3
Irrigation (Water)		Bio-degradation	Toxicology	Disease Resistance
	Ecology		Biodiversity	3
				Solar Power*
Photosynthesis (Plants)	Agronomy		Food Security	3
	Symbiosis		Solar Power*	4
Climatology (Air)	Tourism		Parks and Recreation	4
	Hydrology		Hydropower	3
Stabilization (Earth)				
Total Breakthrough points available=				27

Example: Photosynthesis and irrigation must be learned before agronomy, and agronomy before food security.

Resilience and Breakthroughs and Abilities

You earn breakthrough cards and abilities by learning the prerequisite resilience and knowledge. You mark learning on the Tree of Knowledge with your research token. When learned, collect the breakthrough card with the Prosperity Point value and permanent special ability:

Wind Power, 3 Points: you create 1 fewer waste for production/research.

Potable Reuse, 3: you collect 2 additional water resources when producing or researching in ocean terrain.

Disease Resistance, 4: you may re-roll for 1 external waste creation per building.

Biodiversity, 3: you may remove 1 waste without investing resources from any tile occupied by or adjacent to your Guardian if that tile has only 1 waste.

Solar Power, 4: you may upgrade a workshop to a lab with 1 resource, and create only 1 waste. You choose which waste is placed, but if you choose to place the external waste it is done in the usual way.

Food Security, 3: you may move your Guardian up to 3 tiles away and may gather 2 corresponding resources from a revealed tile. You may only gather resources where the Guardian stops, not each tile on the way.

Parks and Recreation, 4: you collect 2 corresponding resources if you clean up pollution in tiles adjacent to your buildings. You collect for each pollution and even if that tile has a building also.

Hydropower, 3: you collect 2 water and 2 earth resources when you draw a disaster card.

Waste and Pollution

You create waste by building, upgrading, producing, and researching as described in Gameplay. Once 3 waste are on a tile, the tokens are replaced with 1 pollution token. If pollution is on a tile, you can no longer gather, build, upgrade, produce, or research on that tile. Waste/pollution can occur on unexplored tiles, but can not be removed until explored. Waste can not occur on top of pollution.



Investment Guide

You invest resources in productive activities or research.

Where?	What? ¹	How and Why?
Board (Hex terrain tiles)	Build/ Upgrade (1x/2x)	Cost: Build (1 resource) or Upgrade (2 resources) with resources from the target terrain type. Building creates 1 local waste. Upgrading creates 1 local and 1 external waste. Benefit: Workshop can produce a resource. Labs can produce 2 resources or 1 research.
	Clean Waste/ Pollution (3x or 1 research)	Cost: Clean waste/pollution using 3 resources or 1 research. Benefit: Cleaning pollution allows production and research on the cleaned tiles.
Tree of Know- ledge	Learn Resilience (3x or 1 research)	Cost: 3 resources or 1 research. Benefit: you may invest 1 resource to prevent a disaster's immediate pollution.
	Learn Knowledge (3x or 1 research)	Cost: 3 resources or 1 research, provided all prerequisites have been researched. Benefit: Knowledge is a prerequisite for other Knowledge and Breakthroughs, and can be learned by all Guardians. The more Knowledge required, the more Prosperity Points the breakthrough is worth.
	Learn Breakthrough (3x or 1 research)	Cost: 3 resources or 1 research, provided all prerequisites have been researched. Each breakthrough can only be researched by 1 Guardian. Breakthroughs do not require a specific type of resource. Benefits: Breakthroughs provide Prosperity Points based on the amount of knowledge required. Breakthroughs give you special abilities.

¹ Where 'x' means any type of resource.

Overview of the Game

The goal of the game is to overcome disasters to gain Prosperity Points, first to 10 wins.

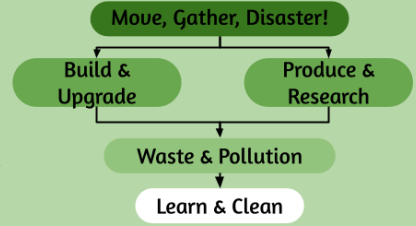
Exploring the terrain, gather resources but beware of disasters! Work together to overcome the disasters. Build and research special abilities. Each action creates waste, leading to pollution that prevents actions.

Overview of a Turn

Up to 4 phases -

Move, Gather Disaster! is the only required phase. Guardians can choose either to Build & Upgrade or to Produce & Research.

If an action in Phase 2 is chosen, then waste & pollution are triggered. Phase 4 is always optional, but strongly recommended!



Game action follows two general rules: actions must be where a Guardian or building is present, and actions in terrain require resources from that terrain. Prosperity Points are earned by researching breakthroughs and overcoming disasters.

Investment Guide

Where?	What?
Board (Terrain tiles)	Build Upgrade (1x/2x)
	Clean Waste/ Pollution (3x or 1 research)
Tree of Knowledge	Learn Resilience, Knowledge, Breakthrough (3x or 1 research)

Resource Guide

Terrain \ Resource	Water	Earth	Plant	Animal	Air
Ocean	1			1	
Plains			1	1	
Mountain	1	1			
Forest			1		1
Desert		1			1