

ANTministrator

A **3D sandbox** managing survival in which you control an **ant** trying to **improve its colony** by gathering resources, farming and building paths for your fellow ants.

Mechanics

Core	Side
• Building: you can dig up tunnels and build bridges with dirt, to create paths that the ants of your colonies can follow since they cannot walk up too steep slopes. • Colony management: keep your queen alive, find food for making the colony grow, find food of a certain type for adding different types of ants in your colony. Spot food and report to the colony for letting your fellow ants start transporting stuff	• Combat: Fend off the vile creatures with the use of your spear, your wit, or the sheer numbers of your colony. • Crafting: mixing different resources and elements to create items, useful to dig, build

World

Emergent	Elements with emergent possibilities: • Building: the player is free to build in every form he likes • Resources and materials: the player can decide to use items found to decorate the colony
Systemic	Systems: • Colony: reacts to the environment and the player inputs. • Enemies: attacks on sight • Weather: rain and wind influence the colony, the player, the terrain and other creatures • Building: Player can create and remove world surfaces • Items/resources: Resources spawns on the world map for the player to harvest
Agency	• Hard gate: ◦ Stone slab: digging to a certain depth the player will find the beginning of a stone slab that can only be destroyed by using the pickaxe ◦ Ant class: to pick up some types of resources player need to unlock different types of ant classes belonging to NPC (e.g. digger, carrier, soldier, lumberjack)



Tools

Shovel	Craftable tool usable for excavating the dirt much faster		
Tool Design	Uses	Unique	Digs dirt faster
		Common	<u>Attract enemies:</u> hitting hard elements (ex. rocks) will create a sound that alerts other creatures and make them follow the sound <u>Deconstructing:</u> can destroy a previous dirt construction
	Disadvantage/Cost	<u>Durability:</u> using it over time it will deteriorate until it breaks <u>Resource cost:</u> it needs to consume materials in order to be produced	
	System Interactions	<u>Building:</u> the player can create tunnels and/or destroy a previous construction	
Complexity	Function	<u>Digs dirt faster</u> <u>Create sound:</u> hitting hard elements (ex. rocks) will create a sound that alerts other creatures	

Pickaxe	Craftable tool able to break the rock		
Tool Design	Uses	Unique	<u>Dig through rock</u> <u>Remain attached to vertical surfaces:</u> in mid-air, if you hit a vertical surface with it, you can attach to that surface <u>Deconstructing:</u> can destroy a previous rock construction
		Common	<u>Attack enemies:</u> can deal more damage to the enemies
	Disadvantage/Cost	<u>Durability:</u> using it over time it will deteriorate until it breaks. <u>Resource Cost:</u> it needs to consume materials to be produced	
	System Interactions	<u>Building:</u> the player can create tunnels and/or destroy a previous construction <u>Enemies:</u> the player can use the tool instead of the jaw to deal more damage to the enemies	
Complexity	Function	<u>Dig through rock</u>	



Spear	A long weapon mainly ideal for fighting, it can also be thrown		
Tool Design	Uses	Unique	<u>Attack from a certain distance</u> : can damage enemies from a certain distance, and if it's not enough it can be thrown against them. <u>Hit distant items</u> : can reach distant items, and if it's not enough it can be thrown against it. <u>Small platform</u> : you can walk over thrown spears
		Common	<u>Attack enemies</u> : can deal more damage to the enemies
	Disadvantage/Cost	<u>Durability</u> : using it over time it will deteriorate until it breaks <u>Resource Cost</u> : it needs to consume materials to be produced <u>Can be thrown once</u> : throwing it will make it unrecoverable	
	System Interactions	<u>Enemies</u> : the player can use the tool instead of the jaw to deal more damage to the enemies <u>Items</u> : the spear can hit other items, moving them <u>Building</u> : can work as a small platform	
Complexity	Function	<u>Combat</u> : can damage enemies from a certain distance, and if it's not enough it can be thrown against them	
	Interaction with other tools	Silk Larva : You can craft a spear with a Silk Larva and throw it, which will leave a rope of silk behind.	
Progression	Can be mixed with a Silk Larva to create a more useful spear		

Silk Larva	A tool that spawns overtime at the queen's nest		
Tool Design	Uses	Unique	<u>Reinforce buildings:</u> Spreading it to constructions will reinforce them and make it more resistant to attacks, weather and the construction weight itself. <u>Blind enemies:</u> Shooting silk against an enemy head for enough time will stun him for some seconds <u>Slowing surfaces:</u> Shooting enough silk on the terrain will create a surface that will slow the movement of any creature moving over it
	Disadvantage/Cost	<u>Time-limited:</u> It will become an ant after a while <u>Durability:</u> using it over time will consume all the silk and empty it	
	System Interactions	<u>Building:</u> reinforce constructions and creates slowing surfaces <u>Enemies:</u> blinds enemies	
Complexity	Function	<u>Reinforce buildings:</u> Spreading it to constructions will reinforce them and make it more resistant to attacks, weather and the construction weight itself.	
	Interaction with other tools	Spear: You can craft a spear with a Silk Larva and throw it, which will leave a rope of silk behind.	

Axe	Craftable tool able to cut plants and trees		
Tool Design	Uses	Unique	<u>Cut down big plants</u>
		Common	<u>Attack Enemies</u> : can deal more damage to the enemies <u>Attract enemies</u> : hitting hard elements (ex. rocks) will create a sound that alerts other creatures and make them follow the sound
	Disadvantage/Cost	<u>Durability</u> : using it over time it will deteriorate until it breaks <u>Resources cost</u> : it needs to consume materials to be produced	
	System Interactions	<u>Building</u> : can destroy previous construction <u>Enemies</u> : can deal more damage to the enemies	
Complexity	Function	<u>Create sound</u> : hitting hard elements (ex. rocks) will create a sound that alerts other creatures	

Problems

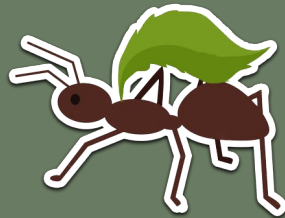
Reaching a resource on a position unreachable directly

Solutions	Disadvantage/Cost
Building a bridge : the player can use the building system to recreate a bridge towards the resource position.	Building resources.
Throwing the spear : the player can throw the spear towards the resource hoping to hit it and move it to a reachable position.	Lose the spear
Spear + Silk Larva : throwing the spear with the Silk larva attached near the resource will leave a rope usable by the player to reach it.	Lose the spear and the silk
Fly using a leaf : standing on a leaf while the weather is windy can help you fly and reach a higher location.	Can't control where the leaf is going
Jumping from a higher position : the player can reach a possible higher position which is more accessible and jump towards the resource	Take a lot of time
(If the resource is on a plant) cutting down the plant: - The player can use the axe to cut the plant - The player can be helped by an ant class	Can't use the plant for moving up



Rainwater entering the underground colony tunnels

Solutions	Disadvantage/Cost
Water-absorbing resources: filling the colony with elements that absorb water can slow down the water from filling the entire colony.	Take time and resources
Drains: digging up tunnels that will move the water back outside	Take time and decrease the durability of the tool
Blocking the entrances: blocking the entrances to prevent water from coming in	Take time and block the ant outside the colony and there is a need to wait for the weather to get better
Moving the colony queen: move the queen to escape the colony's end	It takes time since the queen is slow and exposes her to danger, risking the game over. It stops new ants' production



Enemies

Solutions	Disadvantage/Cost
Enemy colony	
Colony battle: to defeat another colony player can send his colony to battle	Exposes the ants to danger, requires time if the enemies are far from the colony.
One man army: take the risk to go solo against an entire enemy colony	It requires high mastery of the combat system
Wall: building up a wall to block enemies coming towards own colony	Requires to predict attack
Hole: digging to create a big hole to block the way; the player can also fill it with water	Requires to predict attack
Flood the enemy colony: the player can throw the water into the enemy colony to fill it and kill everyone.	Requires preparation and engineering
Moving the colony queen: move the queen to escape the colony's end	It takes time since the queen is slow and exposes her to danger, risking the game over. It stops new ants' production.

Big insect

Fighting it alone: the player can choose to fight it by himself	It requires high mastery of the combat system
Calling the colony: Player can choose to call the colony to aid against the enemy	Exposes the ants to danger, requires time if the insect is far from the colony
Hole: - Digging to create a big hole to block the way; - The player can also fill it with water.	Requires to predict attack
Moving the colony queen: move the queen to escape the colony's end	It takes time since the queen is slow and exposes her to danger, risking the game over. It stops new ants' production.

Gathering food

Solutions	Disadvantage/Cost
Gathering ants: calling ants specialised in hauling resources to the base.	Exposes the gathering ants to danger, and they could be currently hauling other resources the player asked to.
Travel personally: moving back and forth to haul the resource to the base.	It takes time and effort.

Outcome Design Randomness

- **World Generation:** world generation will be a semi-procedural generation, with it:
 - **Starting point:** at the start of the game, the player will spawn with its queen in a small space underground, in a position not far from the surface; in this way, he can easily dig out even without a crafted shovel.
 - **Enemy colonies:** are always generated far enough from the player's starting point to give him time to prepare.
 - **Underground resources:** resources that are strictly influenced by the world generation are generated semi-randomly as well.
- **Weather system:** rain and strong winds are events that have a random chance to happen each cycle of time.
 - **The direction of the wind:** it will continuously change in random directions, influencing the manoeuvrability of the leaf and the spear throw destination.
- **Elements spawn**
 - **Big enemies:** have a chance to spawn near the player location when he's far away from the colony.
 - **Plants:** every plant and tree spawn in a random location on surfaces affected by the rain.
 - **Fruit resources:** each fruit spawn randomly on plants, trees or on the ground.

Generated content

- **Permanent**
 - **World:** each modification made by the player or other elements are saved permanently.
 - **Building:** each construction made by the player is saved permanently.
 - **Colony:** The player's colony is permanent and the movement of each group of ant travelling is saved in the system.
 - **Enemy Colonies:** Enemy colonies are permanent until the player destroys them.
- **Temporary**
 - **Big insects:** if they are out of the player's screen for a long time they could despawn
 - **On death:** if big insects' dead bodies are out of the player's screen for a long time they could despawn, (the narrative excuse would be "another creature took it"), this will nudge the player into getting that resource as soon as possible.
 - **Fruit resources:** if these types of resources are out of the player's screen for a long time they could despawn, again, this will nudge the player into getting that resource faster.
 - **Water:** if the player doesn't collect the water:
 - it will decrease his height with the passage of time
 - when the weather gets hotter it will evaporate

Target Audience

Killer

- **Competition:**
 - **Combat**
- **Impacting:**
 - **Conquest**
 - *Control oriented*
 - **Ordering other ants** (*Moves others to action*)

Achiever

- **Achiever:**
 - **Accumulating**
- **Strategy:**
 - **Managing resources**
 - **Building** (*Think and plan*)
- **Guardian:**
 - **Protecting colony** (*Seek security*)
 - **Weak character** (*Cautious*)

Explorer

- **Completion:**
 - **Open world**
 - **Sandbox**

Socializer

- **Cleric**
 - **Taking care of fellow ants**
- **Community**
 - **Power in numbers** (*Teamwork*)

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