

# FOREST FIGHTERS



**Brandon Aukofer**

**Erin Renshaw**

**Damian Link**

**Michael Troness**

# Forest Fighters

Brandon Aukofer, Damian Link,  
Erin Renshaw, Michael Troness

# Forest Fighter

Genre: strategy

Ages: 10+

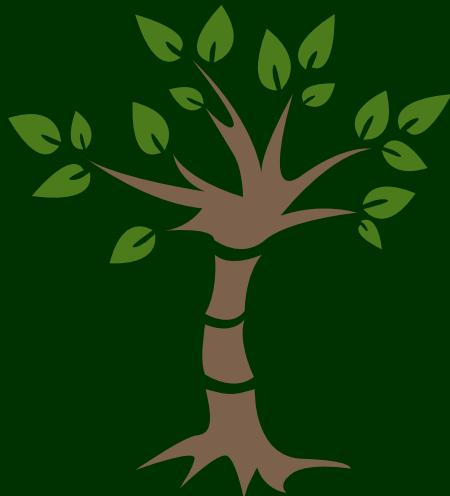
Grow your forest and destroy your opponent's forest. Be the first player to make a forest with 12 segments and prevent your opponents with your rabbits, wolves and lumberjacks. Control fires and droghs to distroy your opponent's forests.



# Rules

## Setup

- Lay out the board
- Distribute pieces to each player
  - 2 lumberjacks
  - 3 rabbit herds
  - 2 wolf packs
- Each player sets up their pieces in their section of the board
- Shuffle the cards
- Each player draws 4 cards from the deck



## Each Turn

- Respawn pieces
- If you have less than 2 lumberjacks, 2 wolf packs, or 3 rabbit herds; you can respawn any lost pieces if you still have at least one left of that piece
- Respawned animals spawn by the water
- Play up to 2 cards
- When everyone decides which cards to play, show the cards
- Execute card actions in this order (highest number of same kinds goes first):
  1. Controlled Burn
  2. Forest fire
  3. Drought
  4. Rain
  5. Animal Movement
  6. Seeds
- Draw cards to replenish your hand to 4 cards

# Rules (continued)

## Board

- **Growing spots**  
Brown spots where saplings can be planted
- **Normal land**  
Green spots
- **Respawning area**  
Tan spots near water

## Win Condition

First player to get their forest to have 12 tree segments wins

Tied players play another round and who ever gets more tree segments wins

## Attacking

- Move an animal to an occupied space
- Rabbits do not initiate an attack
- Roll die
- Attacker has top numbers
- Lumberjacks vs Lumberjacks:  $1/2$  chance of win
- Wolves vs Rabbits:  $1/6$  chance of Rabbit win
- Wolves vs Wolves:  $1/2$  chance of win
- Wolves vs Lumberjacks:  $2/6$  chance of Lumberjack win



# Rules (continued)

## Pieces

### Sapling (1-2 segments)

- A baby tree
- Can be eaten by rabbits

### Tree (3-4 segments)

- An adult tree grown from a sapling
- Can be cut down by a lumberjack

### Big tree (5 segments)

- Oldest tree
- Can be chopped by lumberjack in 2 turns



### Rabbit Herd

- Herbivores that eats saplings
- Can move 6 spaces
- After eating a sapling, a rabbit herd can return to their forest and poop out a seed on a growing spot as long as it stays alive

### Wolf Packs

- Carnivores that eat rabbits, lumberjacks, and other wolfs

### Lumberjacks

- Humans that cut down trees, 2 turns for big trees



## Conclusions

### Brandon Aukofer

If we had more time I would have liked to expand on the cards and add more variables to the game. With the amount of time we have that would be difficult to do while keeping the game balanced. Even the introduction of one card could throw off the balance of the game. When we started making the game we didn't even have cards and that had to be the most boring game I have ever played. With the introduction to the cards we started enjoying the game; it was just a matter of balancing the game. We had to make sure you could achieve victory without taking an hour but we also wanted there to be enough chaos and that good 'schadenfreude' feeling you get when you destroy your opponents forest. It was fun discovering the affordance the different pieces had throughout the making of the game. As certain things were nerfed you could see just how strong other cards were. Of course if we could go on making the game I would also want to add a better tree growing system to further immerse the players. This was another problem we faced when we started. Nobody valued their pieces and it felt very disconnected. There was no inner-circle at all. This was fixed by, not only the cards, but also the introduction to perma-death (if you lost all animals simultaneously). Additionally adding the combat system to make any possibility of combat possible helped the game a lot. Overall there were a lot of changes made to the game that were necessary for it to become the fun game it is now.

### Damian Link

If this was the proof of concept, I would play test more to perfect the balance and the game feel. The pieces would be made sturdier and cleaner looking. The tree pieces would be made like linking logs and look like trees. We went from 2 v. 2 to a 4-player free for all. We changed the rules a few times to make it easier to grok them and for them to be more balanced.

### Erin Renshaw

With more time, I would have it play-tested more to find a better balance and to have more strategy than random chance. I would like to experiment with having more variables and making it into a longer strategy game similar to Catan with hidden victory points. I'd like it to be more like a Eurogame in general. If we were to make the craft better, I would want either a plastic or wood board that had little holes on the planting spots so the trees could have pegs that keep them in place. I think one of the biggest challenges in the process was how to construct the trees. I really wanted them to physically grow taller like real trees (such great haptics for me), but it's hard to make them as strong so they don't fall over. A lot of decision making was with formal elements of the game structure. We changed the player conflict from teams to free for all, and therefore also changing the objective. A lot of decisions had to be made with the rules, changing and playtesting to see what would keep the game balanced. The game evolved every time we played it and we made it closer to perfect with each little tweak, although it is still far from perfect.

### Michael Troness

In conclusion I'm satisfied with the game we made. If I had to make any changes though It would mostly be to the overall craft of the game. More specifically, the map could use some visual improvements. I would want to make it look more like an actual environment. Aside from that, I feel that the mechanics around the animals could be expanded upon.

## Mechanics

In *Forest Fighter* you get to play as a Forest and in doing so you are quite literally mimicking nature. All the mechanics are straight out of nature with a few exceptions. You get to plant the trees, grow them, eat them, and even feel the wrath of a forest fire. In this way *Forest Fighter* really achieves the Biomimicry message.



<https://i-csrs.com/squirrels-and-forest-regeneration>

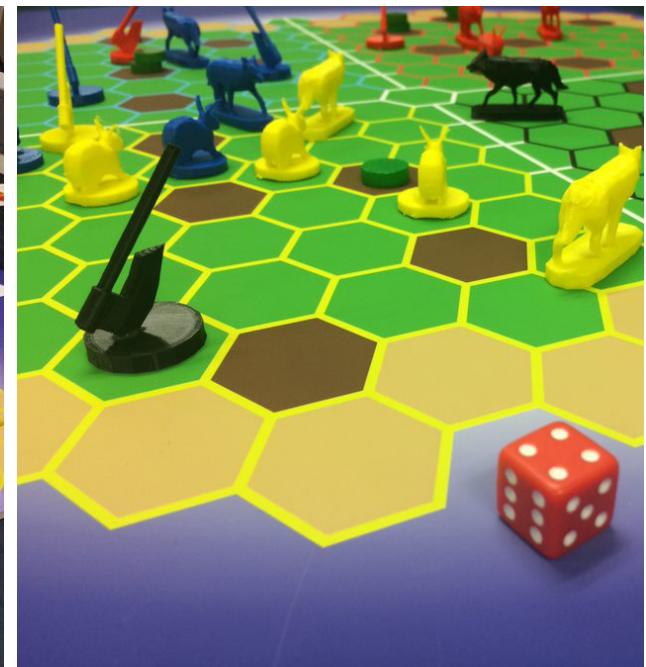


<https://en.wikipedia.org/wiki/Wildfire>

<https://tribune.com.pk/story/1035353/a-fair-trade-5000-saplings-to-replace-five-50-year-old-trees/>

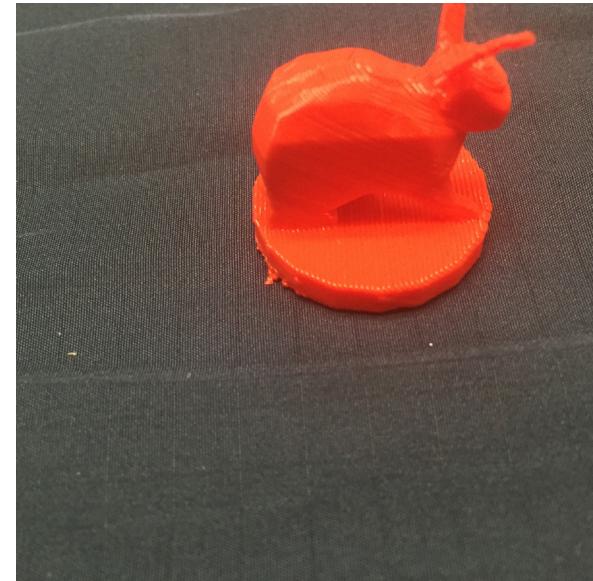


# Environments



## Lumberjacks:

- \* Cut down trees
- \* Cut down big trees in 2 turns
- \* Attack other lumber jacks(1/2 chance of win)
- \* Attack wolves (2/6 chance of win)



## Herd of Rabbits:

- \* Eats saplings
- \* After eatin a sapling can go back and plant a sapling

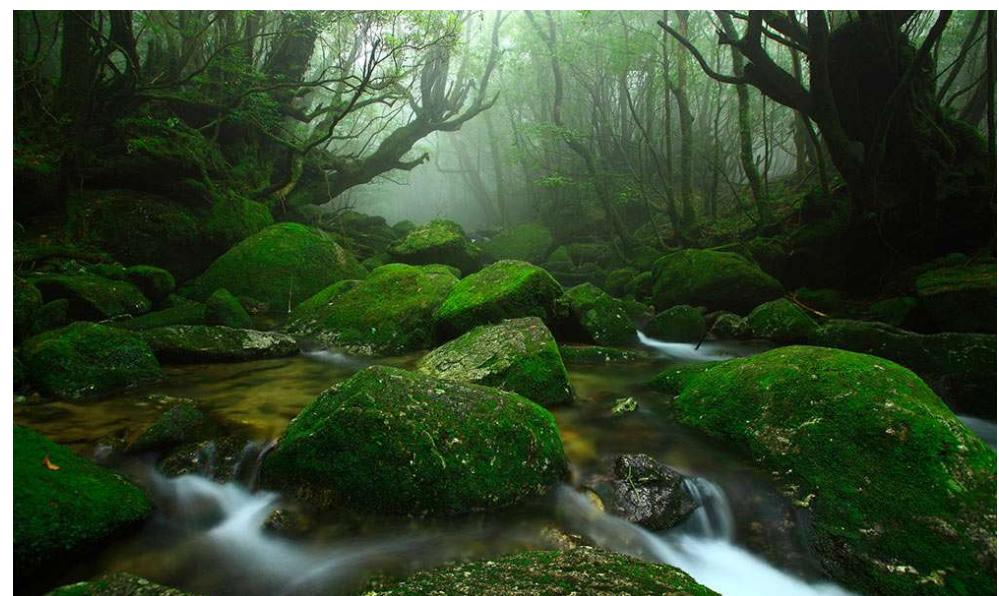
## Pack of Wolves:

- \* Attack other lumber jacks(4/6 chance of win)
- \* Attack wolves (1/2 chance of win)
- \* Attack rabbits(5/6 chance of win)



# Backstory

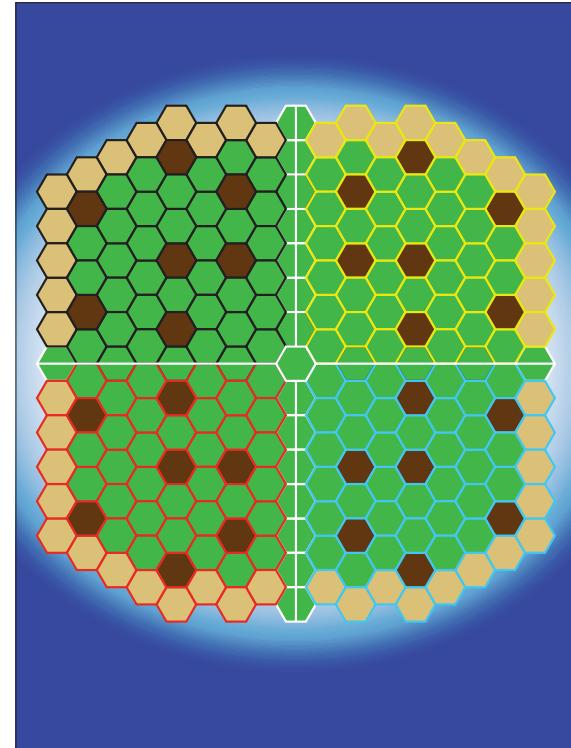
Welcome to the island of Insel prospective settlers. You have each come here in the hopes of creating a utopia for the wild life you have brought. Only problem, none of you are very cooperative towards each other. Each of you wants to grow a forest that's better than everyone else. Use the wild life, your own settlers, and even the very weather itself (people can do that right?) to prevent your adversaries from growing their forest before you.



[https://japan-magazine.jnto.go.jp/en/1503\\_yakushima.html](https://japan-magazine.jnto.go.jp/en/1503_yakushima.html)

# Demographics

This game definitely attracts the more casual relaxed strategy game crowd. The age group could definitely vary but anywhere from 12 and up seems most likely to play this game. The colour palette this game has is very relaxing and the games are relatively easy; but it also has those intense “race to the finish” moments that all groups can get enjoyment out of.



## GDD100 Studios Announces Forest Fighter

December 10, 2018 – Menomonie, WI – GDD100 announces its newest analog game, Forest Fighter, to be on display at the 2018 Fall Stout Game Expo.

In GDD100's newest title Forest Fighter, players play as four rival forests that have rabbits, wolves, and lumberjacks. Plant saplings and grow your forest on an island.

Forest Fighter is a strategy-based, free for all board game that is based on a forest on an island. Try to make the best section of the forest on the island. Send your rabbits and lumberjacks to attack your opponents. Send your wolves to attack your opponent's animals. Have the power to burn and bring droughts to your opponent's forest.



Forest Fighter, and how it came to be, will be displayed at 2018 Fall Stout game Expo. Attendees will be able to play Forest Fighters, and other titles created by other students of GDD100.

 Martin Leissler  
@mleissler



@ Forest-Fighters has the game of the year for sure!

 Forest Fighters  
@Forest-Fighters

If you wanna save the rain forest play our game!



    ...

2:48 PM - December 12 2018

 Larry Harris  
@AxisandAllies



The game could use some more variables..  
@ Forest-Fighters

    ...

3:12 AM - 11 Dec 2018

 Miyazaki  
@Dark-Souls



@ Forest-Fighters The game is a bit too casual for me but fun nonetheless.

    ...

2:48 PM - 6 Dec 2018

 Forest Fighters  
@Forest Fighters



Game just launched! Come check it out at SGX!!

    ...

2:48 PM - 6 May 2015



Forest Fighters  
@Forest-Fighters



Follow

Pre-orders of #ForestFighters get a free tree!



12:48 AM - 10 December 2018



Forest Fighters  
@Forest-Fighters



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Your game is trash @ [Monopoly](#)  
Try a real strategy game at SGX!



1 - 6 May 2015



Hasbro  
@Monopoly



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But who has more sales????? @ [Forest-Fighters](#)



2:48 PM - 10 Dec 2018



Forest Fighters  
@Forest-Fighters



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Thanks @[TheDiscoveryChannel](#) for the Biomimicry Game of the Year Award!



2:48 PM - 6 December 2018



Thomas Tidwell  
@TreeLoverThomas



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Nice to see the forest ecosystem in a game for a change @ [Forest-Fighters](#)

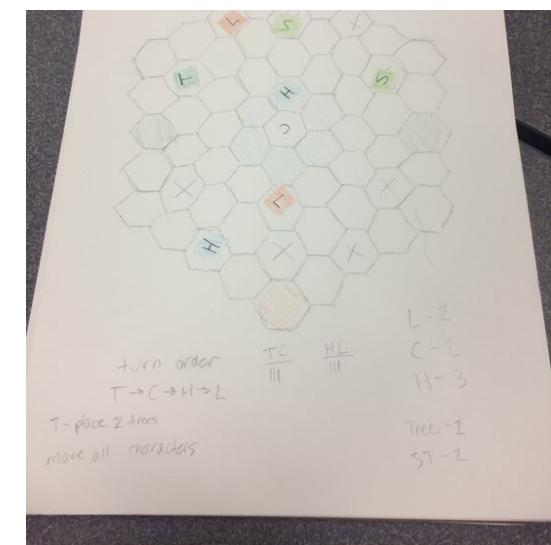
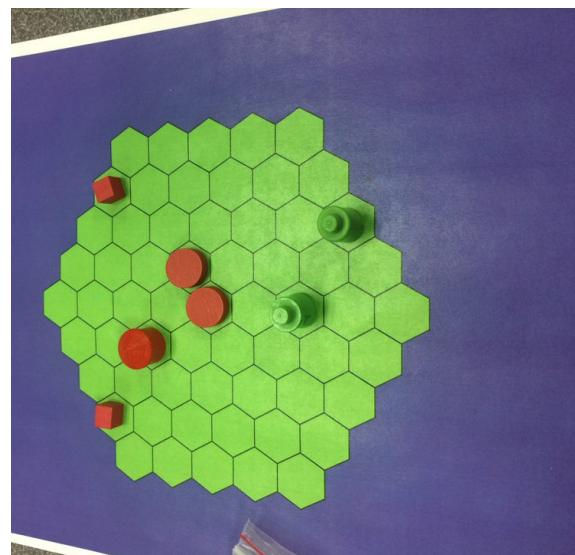
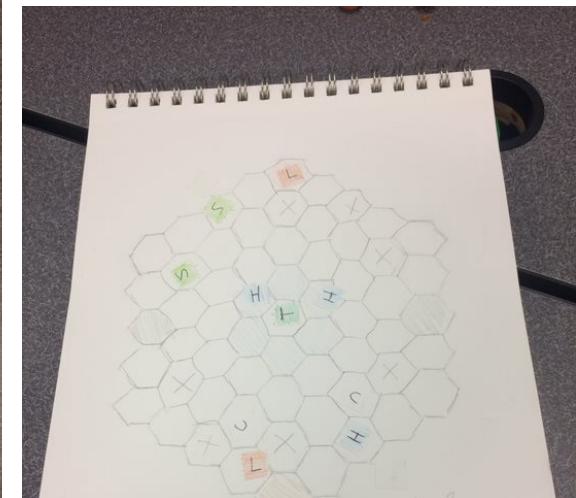
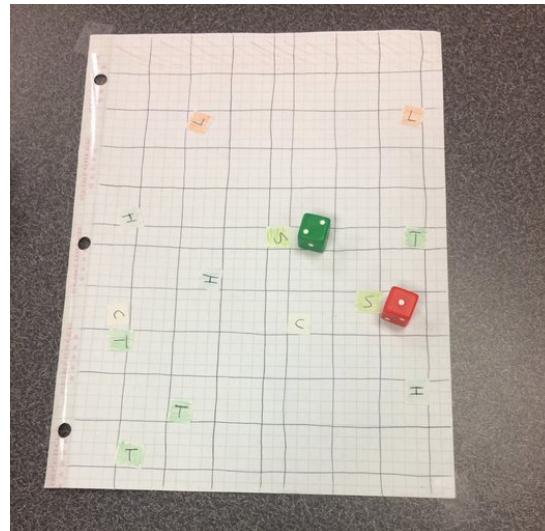


2:48 PM - 10 Dec 2018

# Paper Prototypes:

Our first prototype was a very boring game. It only involved moving animals around the board and growing your trees. It was actually the wolves and trees vs the lumberjacks and rabbits. That was the only dynamic the game had. The game took forever and it was boring for both sides.

We started making some changes to try and fix this.



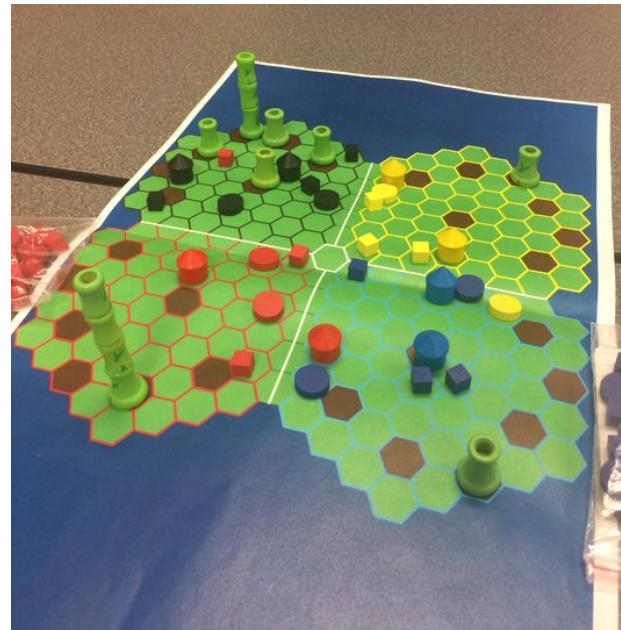
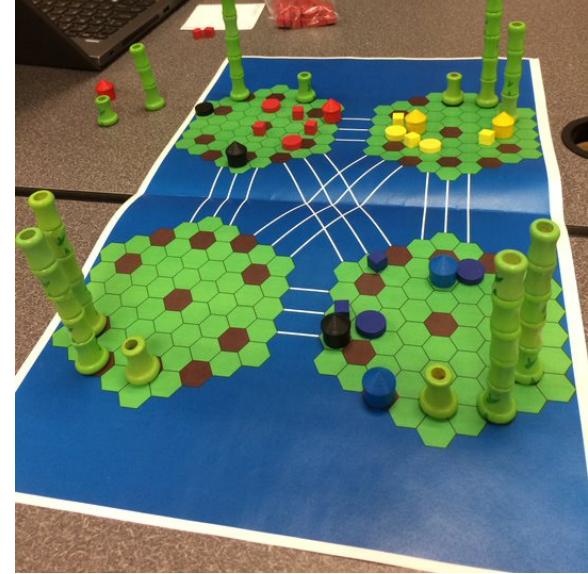
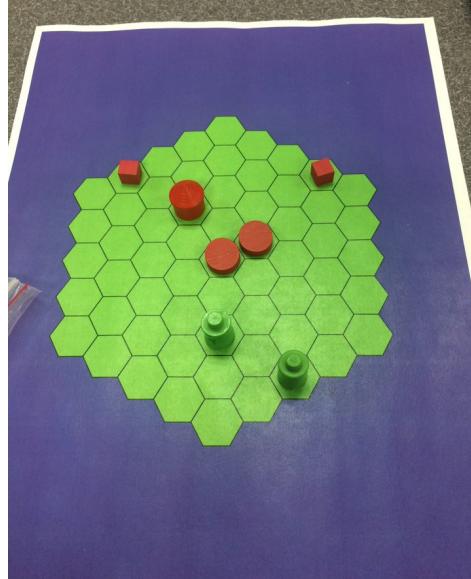
# Paper Prototypes:

We eventually made it so everyone had their own trees to guard and the objective was to protect your own trees and take down your enemy's forest. This made it much better along with the addition to the card system. We added a seed, rain, fire, controlled burn, drought, and move cards to the game. A card that was proposed but never added was a tornado card. The nature of the card would have likely been too destructive so we settled for drought. After this the game was starting to take shape.

We also took the separate maps and combined them. First we did this by connecting them with a sort of road way. Then we moved on to a fully connected board separated by borders which made the game feel much better.

After getting some critique to speed the game up we added simultaneous movement and the game was finally fun to play.

Michael was responsible for doing all the board changes and updates.



# Cards

The cards started off as just text on a white piece of paper, but we added turn order to them and they were given a makeover.

The cards shown to the right are the proposed backs for the cards and the cards on the bottom are the proposed rain, movement, and fire cards.

The art for these is all thanks to Erin.



# Data

This data set showed that despite Erin being attacked heavily she was able to win which hopefully means the game has some sense of balance.

The data showed we all had access to a similar amount of cards which means the deck has a amount of the essential cards.

# Workload

The workload was balanced as a consensus from the group. The two art students Erin and Michael did an excellent job making the poster, logo, pieces, board and cards for the game. They put in a ton of effort for it and they were always timely with their work and it all turned out better than I could have hoped for.

Damian and I (Brandon) were responsible for most of the process book. I did Appendix 1 while he did 2 and 3. He also did the 2nd and 3rd page, rules page ,the Role and Characters page, and the Press Release. I did the Mechanics, Environment, Demographics, and Social Media pages. We both put a lot of effort in making the process book and working on the overall mechanics of the game (although everyone pitched in ideas and mechanics).

	Brandon Used	“ “ Attacked with	Damian Used	“ “ Attacked with	Erin Used	“ “ Attacked with	MichaelUsed	“ “ Attacked with
Round 1	S+R	M	S+M		S+S		S+S	
Round 2	S+D	M	S+M	D	S+M		S+M	M
Round 3	S+M		S+M	M	S+S	M	S+S	
Round 4	M+M		M+C		R+F	M+M+M	R+M	C+F+M
Round 5	R+S		M+R	D	S+S		C+D	
					WINNER			

---

YOUR NAME IN ALL CAPS

MASHUP / UW-STOUT GDD100 / LOKEN / FALL 2018

# Visual Research:



# Forest Research:

- 1.) trees drink about 2,000 liters of water each year.
- 2.) Pine trees are the only species in the whole world that spreads seeds in cones, and those cones also have genders.
- 3.) Roughly 15 minutes to cut a tree down depending on tool and size
- 4.) Trees communicate and share nutrients through underground system built by soil fungi
- 5.) An Oak tree can “drink” 109 Gallons of water a day.
- 6.) An Oak tree can take 20-30 years to grow.
- 7.) Controlled burns help the trees
- 8.) Forest fires can change water flow and even cause landslides because more water is running through the soil instead of being sucked up by the plants.
- 9.) Trees reproduce asexually, duh.
- 10.) Pollen is carried by wind or insects most commonly.

# Animal Movement Research:

- 1.) The average running speed of an adult, healthy male human is around 14 miles per hour. this depends on how fast you are running but in general 14 miles per hour is the average speed.
- 2.) Wolves can reach speeds of 35 miles per hour in short bursts. A wolf's trotting speed is around 5 miles per hour. As wide-ranging animals, wolves can cover as much as 30 miles of ground in a day when hunting
- 3.) When moving at top speed, rabbits can run at 18 to 20 mph. Jackrabbits, which are technically hares, can run at 35 to 45 mph. The gray fox, a common predator of rabbits, can run at up to 42 mph. Baby hares are born with fur and are able to move immediately after birth. Jackrabbits tend to live on open grasslands and use their speed to escape from predators. Rabbits generally try to escape predators by hiding. When they flee from predators, they run in a zigzag pattern.

# Bibliography:

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[https://www.bing.com/images/search?view=detailV2&ccid=rgEkQtFK&id=BFE0A30D74905C3986B-CC25015DBE961A7142ACF&thid=OIP.rgEkQtFKNLbUkuJizh7KwQHaFj&mediaurl=http%3a%2f%2fwww.dadsgamin-gaddiction.com%2fwp-content%2fuploads%2f2012%2f03%2fimg\\_0168.jpg&exph=2304&expw=3072&q=catan&sim-id=608039390467198272&selectedIndex=3&ajaxhist=0](https://www.bing.com/images/search?view=detailV2&ccid=rgEkQtFK&id=BFE0A30D74905C3986B-CC25015DBE961A7142ACF&thid=OIP.rgEkQtFKNLbUkuJizh7KwQHaFj&mediaurl=http%3a%2f%2fwww.dadsgamin-gaddiction.com%2fwp-content%2fuploads%2f2012%2f03%2fimg_0168.jpg&exph=2304&expw=3072&q=catan&sim-id=608039390467198272&selectedIndex=3&ajaxhist=0)

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# Appendix 3

## “Pitches”

# Grow

Genre: chance based

Players: 2-4

Objective:

Grow to a certain size

Summary:

You are a piece of grass that has to grow. Roll two dice. If you get a 7 then you get eaten(roll a die and divide by 2(round down)). If you roll a 12 or a 2 you grow twice . any other number you grow once,



*Captions shall be Arial Italic, 6 pt, 70% gray. The caption can be descriptive text, or a citation (such as a web link for an image) or both. The top of the text box for the Caption shall touch the bottom edge of the image it describes. You can create one caption for each image. Or, you can caption several images in one text box by saying "Images, left to right:" or "Images, clockwise from upper left:"*



# Ecosystem

Players:

2-4

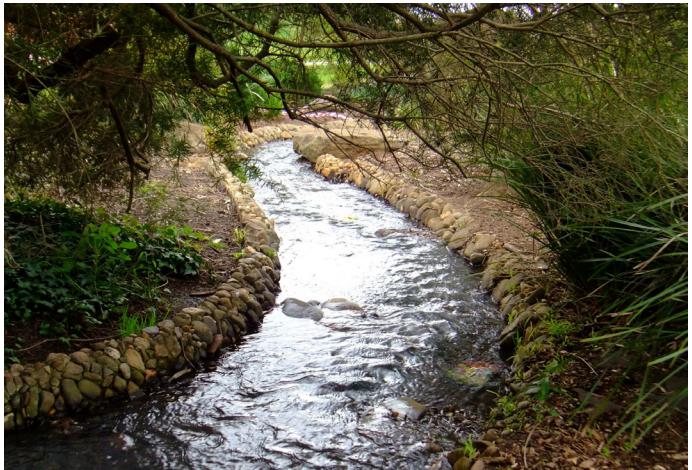
Objective:

Be last animal alive(competitive)

Make a ecosystem that is balanced(Coop)

Summary:

Play as an animal trying to survive in an ecosystem. Find food and water/ avoid humters and enemies. Start with 4 of the animals you chose. Collect food and water and every breeding season if there is enough food materials in an area you can breed and get a new one of your animal. If it is to crowded you can move some to a new area



## Water Bear

Genre: Exploration/Adventure

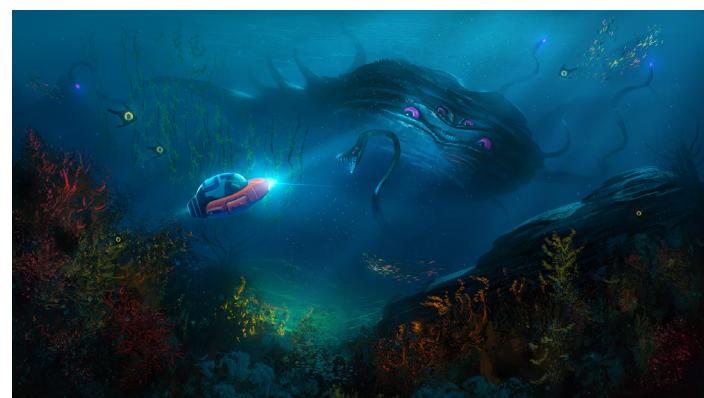
Features: Exploration, Random Encounters

### Overview

After studying Tardigrades or “Water Bears” humanity has made advanced submarines that can withstand the pressure of the deepest places in the ocean while still having a human on board. These submarines are being sent to explore the deepest regions of the oceans to map it out and find new species.

### Game-play Summary

Water Bear is an exploration game where you and X amount of players search the deepest parts of the ocean. You will need to find a certain amount of species and map out a certain amount of area before you’re allowed to return. There will be random encounters with cards that could put a snag in the mission.



# Space Elevator

Genre: Strategy

Features: Resource Management,  
Sabotage, Race to the Top.

## Overview

In the year 2020 the US Government has found a way to combine spider's silk with carbon nanotubes to make the strongest strength to weight ratio material ever known and they are looking for contractors to make a Space Elevator.

## Gameplay Summary:

Space Elevator is a resource based strategy game where you race your opponents into space by making a space elevator. Whoever completes the elevator first gets the juicy government grants for billions of dollars. Your goal is to complete your elevator first by any means necessary; including playing sabotage cards and slowing your opponent down.

