

The background of the cover is a vibrant illustration. At the top, a clear blue sky contains a few small black birds. Below the sky is a city skyline with various skyscrapers in shades of blue, purple, and grey. In the middle ground, a black road with white dashed lines runs horizontally. To the left of the road, a large green tree has a black bird perched on its branches. To the right, another green tree is visible. In the foreground, a green snake is coiled around the word 'Singapore'. Below the road, a brown crocodile is walking on a sandy path. To the left of the crocodile, there are several tall, thin, brown reeds or mangrove roots. On the far left, a large tree with a complex root system is shown. In the bottom foreground, there is a blue body of water with various sea life, including jellyfish, coral, and fish. A white rectangular box with the text 'OFFICIAL RULEBOOK' is positioned at the bottom center, overlapping the water.

Singapore

Untamed

OFFICIAL RULEBOOK

ABOUT SINGAPORE UNTAMED

Singapore Untamed was first conceptualised by our team member, Alexis, as a way to educate players about evolution and inter-species competition for a university ecology module. Since then, it has transformed into a more beginner-friendly and casual game which seeks to highlight Singapore's rich biodiversity and landscape. Players will discover the amazing hidden wildlife in our lush local habitats, while learning about evolutionary game theory and how species ingeniously adapt to different environments. Through fun and engaging gameplay, we hope players can gain a deeper appreciation for Singapore's natural biodiversity.

The team worked on this project from May 2020 to March 2022, with support from Accommodate SG, and funding provided by the SG Eco Fund 2020. As development began during the Circuit Breaker and continued through the COVID-19 pandemic, majority of our meetings and game trials were held online.



Singapore Untamed is proudly presented to you by (from left to right):
Wong Jun Hao, Chan Wan Ting, Alexis Goh, Pang Tien Feng, Zhang Chenxin



Visit our website to learn more
about *Singapore Untamed* by
scanning the QR code, or go to:
<https://tinyurl.com/sguntamed>



Singapore Untamed



Ages 9+



4-6 players



30-60 min

Singapore Untamed is a competitive strategic board game which celebrates Singapore's rich biodiversity.

Experience Singapore's natural environment from the comfort of your living room! Step into the shoes of a local wildlife species as you struggle against nature, evolve against all odds, and negotiate with other wild creatures. Get familiar with ecological concepts in your fight for food, survival, and victory. Acquire cool adaptations and explore different habitats, while having fun learning about the diverse fauna that call Singapore home.

So grab your friends, take a seat, and get ready to explore the untamed Singapore!

Game Components

5X Game Board



6X Six-sided Die



6X Player Pawn





1X Round-counter

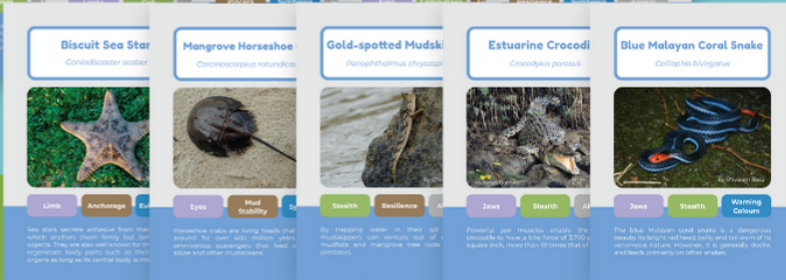
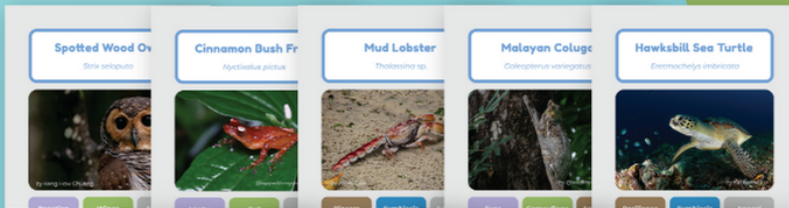


SURVIVAL STRATEGY

6X Cooperate

6X Intimidate

10X Niche card



8X Nature's Bounty card



Wild Deck

- 28x Wild Adaptation (4 unique types)
- 11x Action cards
- 2x Recovery cards



Forest Deck

- 22x Forest Adaptation (4 unique types)
- 2x Destruction cards



Mangrove Deck

- 22x Mangrove Adaptation (4 unique types)
- 2x Destruction cards



Marine Deck

- 22x Marine Adaptation (4 unique types)
- 2x Destruction cards



Urban Deck

- 16x Urban Adaptation (4 unique types)
- 1x Destruction card
- 1x Recovery card



Game Objective

After 10 rounds of gameplay, the winner is the player who has earned the highest number of Evolution Points.

Evolution Points (EVPs) are gained by **collecting Adaptation cards** and **fulfilling Niche sets**. The more copies of an Adaptation you collect, the more points you will earn. You need 3 or 4 copies to complete an Adaptation set. Sometimes, completing an Adaptation set will also unlock a Full Set Special Ability that will get you ahead in the game!

Niche sets are more difficult to unlock as you will have to collect Adaptation cards from different habitats. However, fulfilling a Niche unlocks a powerful special ability too!

At the end of 10 rounds, you can also **convert remaining Food** at the following exchange rate: 10 Food to 1 EVP.

Survival of the Fittest

In Darwin's theory of evolution, individual organisms with advantageous traits are more likely to survive and reproduce in a particular habitat, passing on these favourable traits to the next generation.

Over time, this lineage of organisms has increasingly-specialised traits, known as an **adaptation**.

A species may also eventually develop an **ecological niche**: a specific role it plays within a habitat. This includes the way it interacts with the environment and competitor species.



Adaptation Card

Adaptation Name

Anchorage

Evolution Points (EVP) per card copy collected

x1 = 1 point

x2 = 3 points

x3 = 7 points

x4 = 8 points



by Chan Wan Ting

Species Name

Nerite Snail
Neritidae family

A species that can be found in Singapore was chosen to represent each Adaptation.

These snails stay locked in place on mangrove trees with rich algae and lichen to feed on.

Special Ability for **FULL SET:**

You can resist card effects that force you out of the Mangrove habitat.

Species Information

Full Set Special Ability

Full set abilities are unlocked once all copies of a set have been collected. Not all Adaptation sets have Full Set Special Abilities.



Niche Card

Cinnamon Bush Frog

Nyctixalus pictus



Limbs

Call

Appeal

The nocturnal cinnamon bush frog lives in the forest and breeds in tree cavities. Male frogs call to attract mates and defend their territory but the call of this frog can easily be mistaken as an insect.

Species Name

Required Adaptations

Collect the 3 required Adaptations to complete this Niche set, and unlock a Special Ability!

Evolution Points

For completing the Niche set

12

Niche

CINNAMON BUSH FROG

During the Migration phase, roll 2 dice instead of 1.

Full Set Special Ability

Limbs

- x1 = 1 point
- x2 = 2 points
- x3 = 3 points
- x4 = 6 points

Raffles Banded Langur

Presbytis femoralis

The largest of our three primate species, the langur from tree to tree using its limbs, often landing with crashing sounds.

Appeal

- x1 = 2 points
- x2 = 3 points
- x3 = 5 points
- x4 = 10 points

Great Pied Hornbill

Buccones albinotris

Considered extinct from these charismatic hornbills, comeback. Biologists have return through providing nest boxes in large trees.

Call

- x1 = 1 point
- x2 = 3 points
- x3 = 7 points
- x4 = 10 points

Straw-headed Bulbul

Pycnonotus zeylanicus

The straw-headed bulbul has a melodious call that rings throughout the forest. It is a commonly poached animal due to its value as a songbird.

Game Set-up

- 1 Set up the 5 Habitat boards into a plus (+) shape as shown. Ensure the paths from the Ecotone connect to the correct matching Habitat board.

Turn the Urban Habitat Board over so it displays **Opening Soon**.

- 2 Shuffle the Wild deck. Shuffle the Nature's Bounty deck. Place both decks where convenient.



3 Shuffle the Forest, Mangrove, Marine, and Urban decks. Place them over the empty rectangular space in the middle of each respective Habitat board.

4 Choose a game mode:

BEGINNER

Recommended for first-time players.

Do not use Niche cards throughout gameplay.

STANDARD

Standard gameplay experience.

Randomly distribute 1 Niche card to each player.

SURVIVAL

Randomly choose 5 Niche cards and display them. The first player to get all required Adaptations can claim that Niche.

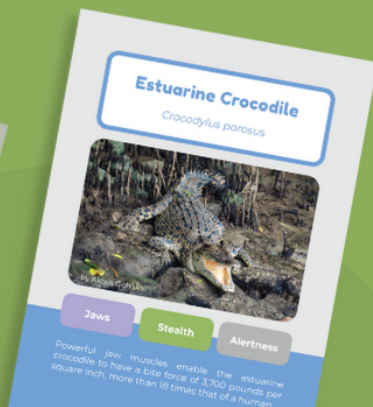
5 Distribute to each player: a player pawn, 6-sided die, and a set of *Survival Strategy* cards (1 Cooperate card, 1 Intimidate card).

EACH PLAYER SHOULD GET



6 Place all player pawns on the tile at the centre of the Ecotone. Do not draw a Wild card at the start of the game.

7 Elect a **Gamemaster** to coordinate gameplay.



How to Play



PHASE ONE

Nature's Bounty

The Gamemaster will shuffle the Nature's Bounty cards and randomly distribute 1 card to each opened Habitat other than the Ecotone. That will be the amount of Food available in each habitat for the current round.

PHASE TWO

Migration

GAMEMASTER SAYS

Everyone ready?

1... 2... 3... 4... 5... 6...

All players will roll their die to determine the number of steps they will take. The Gamemaster then counts from 1 to 6 slowly, and all players will move step-by-step **at the same time**. You won't know who will end up in the same habitat as you until the end of this phase! Movement within each Habitat is in a clockwise direction, while you can move in any direction in the Ecotone.



PHASE THREE

Inter-species Competition

This phase will determine how much Food you will receive this round, based on your interactions with other players in the same habitat as you!

IF YOU ARE IN THE ECOTONE...

Players in the Ecotone will earn 5 Food each, regardless of the number of players currently inside it.

IF YOU ARE ALONE IN A HABITAT...

If you are the only player in the Forest/Marine/Mangrove/Urban habitat, you will receive the amount of Food stipulated for single players on the Nature's Bounty card.

IF YOU HAVE COMPANY IN A HABITAT...

If there are two or more players in the same Habitat, each player in the Habitat must choose a Survival Strategy: To **Cooperate**, or to **Intimidate**. Players can communicate at this stage to work together... or betray each other to gain more Food!

Players in the same Habitat will hold out their chosen Survival Strategy card face down. The Gamemaster will count down to when the players will simultaneously flip over their cards over and reveal their choices. The number of Food distributed is according to the flowchart on the next page.



PHASE THREE

Inter-species Competition: How much Food do I get?

ARE THERE ANY INTIMIDATORS?

NOPE!

Hurray for peace and cooperation!

Distribute the Food from Nature's Bounty to all players in the habitat equally. That's all!

YES...

Someone tried to be greedy...

Distribute the Food from Nature's Bounty to all players in the habitat equally, then continue.

IS THERE ONLY ONE INTIMIDATOR?

ONLY ONE...

The Intimidator dominates all!

The Intimidator will roll one die, to get a value X (between 1 to 6).

The Intimidator will gain X more Food. The Cooperator(s) will lose X Food.

MULTIPLE!

The intimidators have a fierce battle, sustaining injuries.

The Gamemaster will roll one die, to get a value X (between 1 to 6). The Intimidators will lose X Food. The Cooperator(s) are unaffected.

INSPIRED BY

Evolutionary Game Theory

Game theory is an economic concept examining strategy and decision-making in interactions with other people. **Evolutionary Game Theory** is the application of game theory to living biological populations. A popular model of this conflict is the **Hawk-Dove Game**, which assumes a Hawk is always intimidating, whereas a Dove is always cooperative. The theoretical outcomes of these Hawk-Dove interactions form the basis of Food distribution in *Singapore Untamed*.

PHASE FOUR

Evolution

Players will take turns drawing cards based on the tile they have landed on the game board.



HABITAT TILE

Draw 3 cards from the deck corresponding to the habitat you are in. For example, if you're in the Forest, draw from the Forest deck.

WILD TILE

Draw 3 cards from the Wild deck.

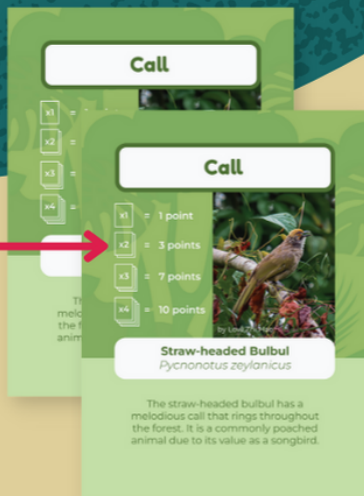


If there are less than 3 cards left in the deck to be drawn from, draw the remaining cards (if any), and collect 5 Food (in total) as compensation.

ADAPTATION CARDS

Collect Adaptation cards of the same type to gain more Evolution Points (EVPs). You may also use them to complete your Niche sets.

- To keep an Adaptation card, you have to **trade in 5 Food for 1 Adaptation card**.
- Display owned Adaptations face up in front of you.
- Return unpurchased Adaptation cards to the bottom of its respective card deck.



2 copies of Call nets you
3 Evolution Points!

ACTION CARDS

Action cards have different effects and allowed times of use. Use them wisely to gain an advantage!

- Keep Action cards in hand for free. However, by the end of the round, you can only **retain up to 2 cards** in hand. Discard any excess cards.
- Certain Action cards may require you to keep it a secret and announce its effects only at the end of the round...
- Refer to the card for full instructions of how it may be used.





DESTRUCTION CARDS

Destruction cards are sneakily hidden in the Habitat decks! The more players are in a habitat, the more likely it will degrade over time...

- Announce and display Destruction cards **immediately** when drawn.
- When 2 Destruction cards have been drawn in a habitat, it will be destroyed. At the end of the round, move any players in the destroyed habitat to the centre of the Ecotone, and flip the game board over. The habitat can no longer be entered.
- Once 3 Destruction cards have been drawn across the Forest, Marine, and Mangrove habitats, the Urban habitat will be opened. Flip the Urban game board over; players will be able to access a whole new area.

RECOVERY CARDS

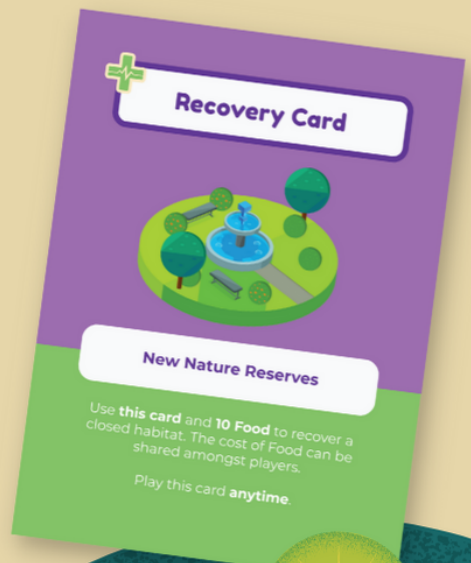
All hope is not lost when a habitat has been destroyed! Players can work together to restore destroyed habitats.

To re-open a habitat, you will need:

- 1 Recovery card (obtainable from the Wild deck and Urban deck)
- 10 Food

These resources may be provided by a single player, or pooled together by multiple players.

Place the used Recovery card in the Discard pile. Reshuffle the Destruction card into its source deck.



NATURE'S
BOUNTY

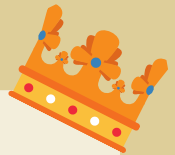
MIGRATION

INTER-SPECIES
COMPETITION

EVOLUTION

These 4 phases make up 1 round.
The game ends after 10 rounds.

Use the round counter to keep track of the rounds!



GAME END

Determining the Winner

The winner is the player who has accumulated the **highest number of Evolution Points (EVPs)**.

- Each completed Niche set = 12 EVP
- Copies of Adaptation cards (depends on set and copies collected)
- Every 10 Food remaining can be converted to 1 additional EVP

Gamemaster Guide

Scan the QR code to access our online *Singapore Untamed* Gamemaster Guide, or visit our website at <https://tinyurl.com/sgu-howtoplay>



Special Thanks

The Singapore Untamed team would like to thank Dr Zeehan Jaafar for verifying the species information in our game.

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WILDLIFE PHOTOGRAPHY

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DESIGN & GRAPHICS

The Singapore Untamed team commissioned LastMinuteWorks to design the game boards, box, logo, and cards. Additional design work by Kee Cheow Yan.

Card and instruction manual icon graphics from flaticon artists:

amonrat rungreangfangsai
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gowi

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max.icons
pongsakornRed
roundicons premium

smalllikeart
surang
torskaya
ultimatearm



Gameplay Summary

(1) Nature's Bounty

The Gamemaster will shuffle Nature's Bounty cards and distribute one card to each Habitat.

(2) Migration

Roll your die. As the Gamemaster counts to 6, move step-by-step at the same time.

(3) Inter-species Competition

IF YOU ARE IN THE ECOTONE: Get 5 Food, regardless of no. of players.

IF YOU ARE ALONE IN A HABITAT: Get amount indicated for single players.

At the count of 3, all players in the same Habitat will hold out their Survival Strategy card, to either Cooperate or Intimidate. The amount of Food received depends on this choice!

Cooperate	Intimidate	Outcome
All	0	Food is shared equally.
Any	1	Intimidator rolls a die (x). Food is split equally. Intimidator gets x more food, Cooperator(s) get x less food.
Any	> 1	Gamemaster rolls a die (x). Food is split equally. Intimidators get x less food. Cooperator(s) are unaffected.

(4) Evolution

Draw cards based on the tile you landed on. Buying an Adaptation costs 5 Food.

Game End

The game ends after 10 rounds.
The winner is the player who has collected the most EVPs.