Our planet is teeming with life! There are over eight million unique animal species on Earth. Darwin suggests this incredible biodiversity shares a common ancestry. Animals better adapted to their environment are more likely to survive and pass on traits to their offspring. Over millions of generations, this iterative process of natural selection leads to the astonishing variety of life we find on our planet.

Fluctuations in climate are one of the major drivers of evolutionary change because they affect every aspect of an ecosystem, from plant life to predators. Larger species perish in hot climates because they have a tough time dissipating heat. Likewise, smaller species have difficulty maintaining heat during times of extreme cold. Evolution: Climate models this phenomenon as it incorporates a shifting climate into the game’s dynamic ecosystem.
WELCOME TO EVOLUTION: CLIMATE!

This game is the culmination of years of collaboration between nine game designers, a world renowned nature artist, and a Russian scientist. The result is an exceedingly fun board game that was featured in the world’s leading scientific journal:

“Evolution features sophisticated biology. Traits can be put together in a dizzying array of combinations, so each game can be very different. The theme of evolution is not just tacked on: it drives play.”

– Stuart West, Professor of Evolutionary Biology, University of Oxford

MORE WAYS TO PLAY!

Go to www.NorthStarGames.com for products that can expand your Evolution gaming experience.

If you are looking for a more casual game to play with friends and family, pick up Evolution: The Beginning at Target. It’s a 35 minute game for ages 8 and up. It’s a wonderful way to introduce people to the Evolution brand and it’s remarkably strategic as a 2-player game.

North Star Games will soon release the highly anticipated Evolution video game. Try out new strategies against the challenging AI, or get matched against online opponents of your skill level!

Use your unique code shown on the sticker above to receive exclusive digital goods and in-game content at northstargames.com/digital
**SET-UP**

- Assemble the Climate Board on the table. One side is for 2-3 player games and the other side is for 4-6 player games.
- Put the Climate Marker in the TEMPERATE zone of the Climate Board.
- Put the Food Tokens in a pile. This is the Food Bank. There is supposed to be an unlimited supply of Food in the Food Bank.
- Give each player 1 Food Token Bag.
- Shuffle the Trait Cards and place them facedown on the table. This is the Draw Deck.
- Remove cards from the Draw Deck depending upon the number of players. Set these cards aside to be used when the Draw Deck runs out.
  - 2 Players: Remove half the cards (it does not need to be exact)
  - 3 Players: Remove 60 cards
  - 4 Players: Remove 30 cards
  - 5 & 6 Players: Do not remove cards
- Shuffle and place the 15 card deck of Cold Side Climate Events on the bottom left side of the Climate Board. Draw the top card and place it faceup under the Climate zone named on the card.
- Shuffle and place the 15 card deck of Hot Side Climate Events on the bottom right side of the Climate Board. Draw the top card and place it faceup under the Climate zone named on the card.
- Randomly determine the first player. Give the First Player Marker to that player.
COMPONENTS

- 1 Rulebook
- 1 Climate Board
- 1 Climate Marker (with two stickers)
- 1 First Player Marker
- 177 Trait Cards
- 30 Climate Event Cards
- 20 Species Boards
- 40 Wooden Markers
- 240 Food Tokens
- 6 Food Bags
- 2 Player Aids
GOAL

The goal of Evolution: Climate is to thrive in the midst of an ever-changing ecosystem where food is scarce, predators lurk, and the climate can fluctuate between extreme temperatures. You will get points for feeding your species, increasing their population, and evolving them to best ensure their survival.

At the end of the game, players get points for:

- The Food their species have eaten during the game.
- The Population of their surviving species.
- The Trait Cards on their surviving species.

PLAYING THE GAME

A game of Evolution: Climate usually takes 5 to 7 rounds. Each round consists of the following 5 phases:

1. Deal Cards
2. Select Food Cards
3. Play Cards
4. Modify Environment
5. Feeding

When playing with 2 or 6 players, use the appropriate rule variant on Page 11.

PHASE 1: DEAL CARDS

Place a Species Board in front of any player who does not have one. If this is the first round of the game, then every player will get a Species Board. Put a green Wooden Marker on the “1” space of the Population track and a brown Wooden Marker on the “1” space of the Body Size track.

Deal each player 4 cards from the Draw Deck, plus 1 card for each Species Board they have in front of them. If the Draw Deck runs out (or if it ran out when a species went extinct in the previous round), this will be the final round of the game. Shuffle the Discard Pile into a new Draw Deck (5-6 player games), or use the cards that were set aside as a new Draw Deck (2-4 player games).

PHASE 2: SELECT FOOD CARDS

Each player chooses a Trait Card from their hand and puts it facedown on the Watering Hole. These are called the Food Cards.

The Food Cards will be revealed in Phase 4: Modify Environment to determine two things:

- **The amount of Food available for the round.**
  The number in the leaf at the bottom right of each Trait Card represents the amount of Plant Food that will be added to (or removed from) the Watering Hole.

- **Whether the climate shifts into a new zone.**
  Some Trait Cards have Sun or Snowflake icons above the Plant Food number. Sun icons on the cards played will push the climate warmer and Snowflake icons will push the climate colder.
PHASE 3: PLAY CARDS

Starting with the First Player and moving clockwise around the table, a player may play as many or as few Trait Cards as they want. There is no limit to the number of cards a player can save in their hand for a later time. Play will go one time around the table which means every player will only get one turn during this phase.

There are three possible things a player can do with each Trait Card. They may be done in any order and multiple times each:

1) Play a Trait

A player may place a Trait Card facedown above one of their species. A species may not have any duplicate Trait Cards and may not have more than 4 Trait Cards.

2) Create a New Species

A player may discard a Trait Card faceup into the Discard Pile to get a new species. They take a new Species Board and put a green Wooden Marker on the “1” space of the Population track and a brown Wooden Marker on the “1” space of the Body Size track. The new species must be placed either to the left or the right of the player’s existing species; it may not be placed between existing species.

3) Increase Body Size or Population

A player may discard a Trait Card faceup into the Discard Pile to increase the Body Size or Population of one of their species by 1. A species cannot move its Wooden Markers beyond Body Size 6 or Population 6, but a species can effectively have a larger Body Size with a trait like Hard Shell.

Any time during their turn, a player may remove a Trait Card from any of their species and place it faceup in the Discard Pile. This may be done to make room for another trait, or because the trait is no longer advantageous to the species. Players do not get any benefit from removing a Trait Card in this way other than making room for another trait or removing a trait that is no longer advantageous to the species.

After a player has finished playing cards for the round, they may return any number of cards from their hand to the bottom of the facedown Draw Deck (to be dealt at a later time) and draw the same number of cards from the top of the Draw Deck. A player may not return more cards than are available in the Draw Deck. The newly drawn cards cannot be played as traits until Phase 3: Play Cards of the next round.

When everyone has had a chance to play cards, flip all of the newly played Trait Cards faceup.
PHASE 4: MODIFY ENVIRONMENT

Check around the table for any Trait Cards that have this icon on the top left corner. These cards have effects that might trigger before the Food Cards are revealed. If a player has more than 1 of these cards in play, they choose the order in which their traits activate.

Reveal the Food Cards on the Watering Hole and complete the following steps in order:

1) Adjust the Climate

- Move the Climate Marker 1 zone warmer if there are more Sun icons on the Food Cards than Snowflakes icons.
- Move the Climate Marker 1 zone colder if there are more Snowflake icons on the Food Cards than Sun icons.
- The Climate Marker does not move if there are an equal number of Sun and Snowflake icons on the Food Cards.

2) Trigger Climate Events

The Climate Marker indicates the current Climate zone. If there is a Climate Event Card in the current Climate zone, read the card and do what it says. Read the Reference Section – Climate Event Cards if you have questions about how to resolve a Climate Event Card. Resolved Climate Event Cards are placed at the bottom of the appropriate deck (unless otherwise indicated). When a Cold Snap or Heat Wave occurs, disregard the Climate effects on the current Climate zone for that round and use the Climate effects on the Climate Event Card instead.

3) Climate Population Loss

Six of the Climate zones contain a Body Size icon and a Climate icon (Suns or Snowflakes).

Species within the Body Size range indicated in the zone lose one Population for each Climate icon in that zone.

Suns represent Population loss due to heat, and Snowflakes represent Population loss due to cold.

Every species in play loses Population at the same time according to the current Climate zone. Species that go below 1 Population go Extinct. See Extinction on page 11.

Species may have protective traits that prevent some or all of this Population loss. The effects of protective traits are cumulative. For example, a species can prevent up to 3 Population loss due to heat if it has Burrowing, Migratory, and Nocturnal.
4) Adjust the Plant Food

Add (or remove) Plant Food to (or from) the Watering Hole based upon the Food Cards and the Climate zone. The number in the leaf at the bottom right of each Food Card represents the amount of Plant Food that will be added to the Watering Hole. First total all of these numbers, then adjust that amount by the amount printed in the leaf on the current Climate zone. Sometimes there will be no Food in the Watering Hole for a round and sometimes Food will be removed! This is not unusual when the Climate is very cold.

5) Replace Climate Event Card

If a Climate Event Card was triggered, draw a new Climate Event Card from the appropriate deck (cold or hot) and place it under the appropriate Climate zone. This new Climate Event Card cannot get triggered until the next round. There will always be 2 face-up Climate Event Cards on the Climate track at the beginning of each round (1 cold and 1 hot), and only 1 Climate Event can get triggered each round.

**PHASE 5: FEEDING**

In this phase, players will take turns feeding one species at a time in a rush to eat from a limited supply of Food. Play will move clockwise around the table until every species is done feeding or all hungry species cannot eat. This means a player might get several feeding turns during the Feeding Phase, but it also means that a player might not get a single feeding turn if Food is scarce!

A species is hungry if it has less Food on its Species Board than its Population. Each Population that does not have Food is a hungry Population.

Beginning with the First Player and continuing clockwise, each player must feed one of their species. A player may pass only if none of their species are hungry or if it is not possible to feed any of their hungry species. Passing on a feeding turn does not prohibit a player from feeding on a future feeding turn in the same Feeding Phase.

When a species takes Food, place the Food in the space above the Population track starting with the “1” Population space. A species may never take more Food than it has Population unless it has Fat Tissue.

**Feeding Non-Carnivores**

*Take* 1 Plant Food from the Watering Hole and place it onto the Species Board of the species you are feeding. Some traits (like Foraging and Cooperation) modify the amount of Food a species takes from the Watering Hole.
Feeding Carnivores

A species with the Carnivore trait is a Carnivore. Carnivores can never take Plant Food, not even with the help of traits such as Long Neck or Cooperation. They feed by attacking other species. A player may attack any species including their own. Carnivores continue to attack even if the Watering Hole runs out of Plant Food.

A Carnivore can attack another species only if all of the following are true:

- The Carnivore is hungry (or has the option to eat because of a trait like Fat Tissue).
- The Carnivore’s Body Size is greater than the Body Size of the species being attacked.
- The Carnivore has the traits necessary to overcome the attacked species’ defensive traits.

After a Carnivore has attacked another species:

- Reduce the Population of the attacked species by 1. If this reduces its Population to below the amount of Food already eaten, place the excess Food in the attacked player’s Food Bag. If this reduces its Population to 0, see Extinction on page 11.
- Take Meat Food from the Food Bank equal to the attacked species’ Body Size and place it on the attacking Carnivore’s Species Board.

IMPORTANT FEEDING RULES

- A species must eat if it is hungry and there is Food available. This means a Carnivore must eat a species with Horns if it is the only legal target, even if it is that player’s own species!
- When a species eats from the Watering Hole, it takes 1 Plant Food (unless a trait modifies this amount). When a Carnivore attacks another species, it takes Meat Food equal to the Body Size of the attacked species.
- Non-Carnivores normally eat Plant Food, but they can also eat Meat Food with traits such as Scavenger or Cooperation. A Carnivore may never eat Plant Food under any circumstance.
- A species can never take more Food than its Population unless it has Fat Tissue.

End of Feeding

Feeding ends when all species are unable to eat, or when those species that have a choice (because of Fat Tissue or Intelligence), choose not to eat.

- If a species did not eat Food equal to its Population, all hungry Population from that species are lost. Move the Population marker down to the number of Population that received Food. If all of the Population on a species are hungry, it goes extinct. See Extinction on page 11.
- Players remove the Food from their Species Boards and place it in their Food Bag.
- Any Plant Food remaining on the Watering Hole stays there for the next round.
- The game ends if the Draw Deck ran out during Phase 1: Deal Cards of this round or if the Draw Deck ran out due to a species going extinct in the previous round. See End of Game Scoring on page 11.
- If the game did not end, pass the Incredibly Awesome First Player Marker to the left and begin a new round starting with Phase 1: Deal Cards.
EXTINCTION

If the Population of any species is reduced to 0, it goes extinct and the owner immediately does the following:

- Discards the Trait Card(s) on that species and draws 1 card from the Draw Deck for each discarded card. If the Draw Deck runs out of cards, shuffle the Discard Pile into a new Draw Deck (5-6 player games), or use the cards that were set aside as a new Draw Deck (2-4 player games). The next round will be the final round of the game.
- Discards the Species Board and places any Food on that Species Board in their Food Bag.
- If the species that went extinct was between two species, close the gap between the adjacent Species Boards.

Reminder: If a player loses their last species, they will receive a free one at the start of the next Deal Cards phase.

END OF GAME SCORING

The game ends if the Draw Deck ran out during Phase 1: Deal Cards of the current round or if the Draw Deck ran out due to a species going extinct on the previous round.

Scoring:

- Each Food in a player’s Food Bag is worth 1 point.
- Each surviving species is worth points equal to its Population.
- Each Trait Card on a surviving species is worth 1 point.

Add up each player’s points to determine the winner. If there is a tie, the player with the most Trait Card points is the winner. If there is still a tie, the player with the most Population points is the winner. If there is still a tie, then you must immediately order pizza (either a meat lover’s pizza or vegetarian pizza) and play again.

Scoring is an attempt to gauge how well your species flourished during the game and how likely they are to thrive in the future. The amount of Food a species has eaten over time is a proxy often used by evolutionary biologists to measure the relative success of a species.

VARIANT: NO CLIMATE EVENTS

Evolution: Climate was originally designed without Climate Event Cards. We recommend playing without these cards if anyone at the table is new to the game. You will get a perfectly balanced gaming experience with a little less chaos and a little less theme.

VARIANT: QUICK PLAY

During Phase 3: Play Cards, all players play their cards at the same time without looking at what their opponents are doing.

2 AND 6-PLAYER RULES

- The 2-player game is played with the same rules as the normal game except a species can have a maximum of 3 traits instead of 4.
- The 6-player game is played using the Quick Play Variant rules.

TABLE SPACE ISSUES

If table space is an issue, players can flip their Species Boards over and play them vertically.
**Ambush**

Allows a Carnivore to attack a species protected by the Warning Call trait.

A Carnivore with Ambush may ignore one defensive trait on any species that has the Migratory trait when determining if it can attack that species.

**Burrowing**

A Carnivore cannot attack this species unless one or more of its Population is hungry. Normally this protection is only active when the Burrowing species is fully fed, but a species with Burrowing and Hibernation is protected when all but 2 of their Population is fed.

Population loss due to both heat and cold is reduced by 1 for this species. For example, in the Ice Age Climate zone, there are 4 Snowflake icons representing 4 Population lost due to cold. A species with Burrowing negates 1 of those Snowflakes, so it loses only 3 Population.

**Carnivore**

This species can attack another species during feeding if its Body Size is greater than the Body Size of the species being attacked, and it has the traits necessary to overcome its preys’ defensive traits. Carnivores may never take Plant Food, even with other traits such as Long Neck or Cooperation.

**Climbing**

A Carnivore cannot attack a species with Climbing unless it also has Climbing.
Defensive Herding

A species with Defensive Herding may not be attacked unless the attacking Carnivore has a Population that is greater than the Population of the species with Defensive Herding. Population loss due to cold is reduced by 1 for this species. For example, in the Ice Age Climate zone, there are 4 Snowflake icons representing 4 Population lost due to cold. A species with Defensive Herding negates 1 of those Snowflakes, so it loses only 3 Population.

Cooling Frills

Add 2 to this species’ Body Size when determining if a Carnivore can attack it. A species with Body Size 6 and Cooling Frills will have an effective Body Size of 8. Cooling Frills does not increase the amount of Meat Food that a Carnivore takes after an attack.

Population loss due to heat is reduced by 3 for this species. For example, in the Scorching Climate zone, there are 4 Sun icons representing 4 Population lost due to heat. A species with Cooling Frills negates 3 of those Sun icons, so it loses only 1 Population.

The most efficient way for an animal to dissipate heat is to have a high ratio of body surface area compared to its weight. A large frill, such as those on the Frilled-Neck Lizard, allows an animal to cool itself by unfurling its frills. This gives the species a temporary increase in their body’s surface area from which to dissipate heat. An additional benefit is that the frills can be expanded to deceive predators into thinking the animal is larger than it is.

Cooperation

Every time this species takes Food, if you have a species to the right of it, that species also takes 1 Food of the same type (Plant or Meat) from the same source (Watering Hole or Food Bank). This means Cooperation will get triggered by traits such as Long Neck, Scavenger, Intelligence, and even another Cooperation (but not Foraging or Fat Tissue). Don’t forget that a Carnivore cannot take Plant Food even with the help of Cooperation.

Defensive Herding

A species with Defensive Herding may not be attacked unless the attacking Carnivore has a Population that is greater than the Population of the species with Defensive Herding. Population loss due to cold is reduced by 1 for this species. For example, in the Ice Age Climate zone, there are 4 Snowflake icons representing 4 Population lost due to cold. A species with Defensive Herding negates 1 of those Snowflakes, so it loses only 3 Population.

Herding is not only used as a defensive mechanism, but also as a way of sharing body heat to stay warm in the cold. Emperor Penguin colonies huddle together to conserve body heat and shield themselves from the frigid winds of Antarctica. Each penguin takes a turn on the outside of the huddle before shifting back to the inside to get warm again.

Fat Tissue

This species has the option to take Food even when it is not hungry. Place the taken Food on the Fat Tissue card instead of the Species Board. The Food stored on Fat Tissue may not be greater than the Body Size of this species.

Immediately before the Food Cards are revealed next round, place the Food from Fat Tissue onto the Species Board (up to its hungry Population). Place the Food on Fat Tissue in the owner’s Food Bag if the trait is discarded, the species goes extinct, or at the end of the game.
Fertile

Before the Food Cards are revealed, this species gains 1 Population if there is Food on the Watering Hole (for instance, from the previous round).

Foraging

This species receives an additional Plant Food from the same source (Watering Hole or Food Bank) anytime it takes Plant Food (unless it does not have a hungry Population for the additional Food). The additional Food does not trigger an additional take action.

**Foraging** is only triggered by traits that take such as **Cooperation**, **Long Neck**, and **Intelligence** (or by going to the Watering Hole).

Hard Shell

Add 4 to this species’ Body Size when determining if a **Carnivore** can attack it. A species with Body Size 6 and **Hard Shell** will have an effective Body Size of 10. **Hard Shell** does not increase the amount of Meat Food that a **Carnivore** takes after an attack.

Heavy Fur

Population loss due to **cold** is reduced by 4 on this species. For example, in the Ice Age Climate zone, there are 4 Snowflake icons representing 4 Population lost due to **cold**. A species with **Heavy Fur** negates all 4 of those Snowflakes and loses no Population instead.

Population loss due to **heat** in the three hottest Climate zones is increased by 1 for this species. For example, in the Scorching Climate zone, there are 4 Sun icons representing 4 Population lost due to **heat**. A species with **Heavy Fur** loses 5 Population instead.
**Intelligence**

A player with Intelligence has the option to discard one or more cards from their hand during any of their feeding turns to gain one of the following effects:

- If the species with Intelligence is a Carnivore, each card discarded negates all copies of 1 defensive trait for this species’ current attack.
- If the species with Intelligence is not a Carnivore, it takes 2 Plant Food from the Food Bank for each card discarded. This may be done in addition to the player’s normal feeding turn and as many times as you want.

A player is never forced to use this ability, even if Intelligence is on a species that is still hungry.

**Horns**

When a species with Horns is attacked, the attacking Carnivore's Population is reduced by 1. The reduction in Population occurs before the Carnivore takes Meat Food for the attack. This means it is possible for a Carnivore and its prey to both go extinct if they each have a Population of 1. Only Scavengers would get Food in that circumstance.

**Hibernation**

Up to 2 Population may be ignored when determining if this species is hungry. Those Population don’t need to be fed during Phase 5: Feeding and they won’t be lost due to hunger at the End of Feeding. A species with Burrowing and Hibernation is protected when all but 2 of their Population is fed.

Population loss due to cold is reduced by 1 for this species. For example, in the Ice Age Climate zone, there are 4 Snowflake icons representing 4 Population lost due to cold. A species with Hibernation negates 1 of those Snowflakes, so it loses only 3 Population.

**Long Neck**

Take 1 Plant Food from the Food Bank (not the Watering Hole) before the Food Cards are revealed each round.
Migratory
After all species have finished feeding for the round, this species takes up to 2 Food from the Food Bank if the Watering Hole is empty (provided it has enough hungry Population). This occurs even if there was no Watering Hole Food during the round.

Population loss due to both heat and cold is reduced by 1 for this species. For example, in the Ice Age Climate zone, there are 4 Snowflake icons representing 4 Population lost due to cold. A species with Migratory negates 1 of those Snowflake icons, so it loses only 3 Population.

Many species migrate with the seasons, traveling to new locations to stay within a comfortable climate. But this passage is not without peril. Predators often attack migrating species, thinning their herds as they make their long and arduous journey across the planet.

Mud Wallowing
A player must discard a card from their hand to the faceup Discard Pile before their Carnivore may attack a species with the Mud Wallowing trait. A card must be discarded before each attack.

Population loss due to heat is reduced by 1 for this species. For example, in the Scorching Climate zone, there are 4 Sun icons representing 4 Population lost due to heat. A species with Mud Wallowing negates 1 of those Sun icons, so it loses only 3 Population.

Some animals wallow in mud to regulate their body temperature and keep cool. It takes longer for water to evaporate when it is mixed with mud, which means the body is being cooled for a longer period of time. Wallowing in mud may also serve as camouflage against predators.

Nocturnal
Before each of your feeding turns, this species (Carnivore or Non-Carnivore) may take a free feeding action if there are no Carnivores in play that could eat it. You may feed the same species again during your normal feeding action or you may feed a different species. The additional feeding triggers cards such as Cooperation and Foraging.

To determine if Nocturnal is in effect, a Carnivore with Intelligence is considered able to eat the Nocturnal species only if the Carnivore’s owner has enough cards in hand to get past all of the Nocturnal species’ defensive traits. Carnivores that are fully fed are unable to attack any species.

Population loss due to heat is reduced by 1 for this species. For example, in the Scorching Climate zone, there are 4 Sun icons representing 4 Population lost due to heat. A species with Nocturnal negates 1 of those Sun icons, so it loses only 3 Population.

Pack Hunting
This species’ Body Size is treated as being equal to its Population plus its Body Size when determining if it can attack another species. For example, a species with a Population of 5 and a Body Size of 3 will have an effective Body Size of 8 when determining if it can attack another species.
Scavenger

*Take 1 Meat Food from the Food Bank anytime a species loses 1 or more Population due to an *attacking* Carnivore.*

If the *attacking* Carnivore has the Scavenger trait, it gets an extra Meat Food for the *attack.* If the *attacked* species has the Scavenger trait, it gets a Meat Food after being *attacked.*

Symbiosis

This species cannot be *attacked* if you have a species immediately to the right of it, and that species has a larger Body Size than the species with Symbiosis.

Warning Call

If you have a species to the right and/or left of a species with Warning Call, it/they cannot be *attacked* unless the Carnivore has Ambush. Warning Call does not protect the species that has the Warning Call trait.

Many species have evolved a warning call behavior trait which alerts members of their group when dangerous predators are near. However, this behavior comes at a cost. While it allows others in their group to escape, it also draws the predator’s attention to the individual making the noise.
**Cold Snap**

When a **Cold Snap** occurs, disregard the Climate effects on the current Climate zone for that round and use the Climate effects on the Climate Event Card instead.

**Desertification**

When **Desertification** occurs, every species loses 1 Body Size. Species that have 1 Body Size remain at 1 Body Size.

Do not add Food to the Watering Hole if the Food total is positive for the round, but remove Food as normal if the Food total is negative.

Weather patterns are constantly shifting in response to the changing geography. As landmasses move, ocean currents change, and mountain ranges rise and fall, a new mountain range may deprive a nearby region of rain clouds for many hundreds of thousands of years, turning today's flourishing landscape into tomorrow's barren desert. Everything is in flux when looked at over eons of time. Even the Sahara desert was once a lush savanna.

**Heat Wave**

When a **Heat Wave** occurs, disregard the Climate effects on the current Climate zone for that round and use the Climate effects on the Climate Event Card instead.

**Glacial Thaw**

When **Glacial Thaw** occurs, place the **Glacial Thaw** card faceup on the Watering Hole section of the Climate Board. The 3 Sun icons on that card will be added to the Climate icon count when the Food Cards are revealed during Phase 4: Modify Environment of the next round. Draw another Climate Event Card as normal during step 5 of the phase in which **Glacial Thaw** was triggered.
Meteorite

When a Meteorite impact occurs, do not add Food to the Watering Hole if the Food total is positive for the round, but remove Food as normal if the Food total is negative. Do this every round until the end of the game! Population loss due to heat and cold occurs as normal.

The impact of a massive meteorite is one of the most cataclysmic events that can occur. It has the potential to change the orbital path of a planet while ejecting enormous amounts of material into the air. Some of this material will ignite forest fires as it falls back to Earth. The remaining particles stay in the atmosphere for years, blocking the sunlight needed for plant life to survive. The mass extinction of plant and animal life around 66 million years ago is generally considered the result of a massive comet or asteroid impact at the end of the Cretaceous period known as the Cretaceous-Paleogene extinction event.

Volcanic Eruption

When a Volcanic Eruption occurs, you will move the Climate Marker to the designated Climate zone at the end of Phase 5: Feeding. The next round of the game will start with the Climate Marker in the new Climate zone.

Massive volcanic eruptions can jettison ash and sulfur high into the stratosphere. Sulfur reacts in the upper atmosphere to create an atmospheric haze that blocks the solar radiation, significantly cooling the planet for many years afterwards. The eruption of Krakatoa in 1883 lead to a significant reduction of average summer temperatures across the Northern hemisphere for over 5 years.

Wildfire

When a Wildfire occurs, all species without the Burrowing trait lose 1 Population. This Population loss is not considered loss due to heat so it cannot be prevented with heat related traits. The Food that would normally be added to the Watering Hole this round is instead set aside. This Food is added to the Watering Hole before Phase 1: Deal Cards of the next round.

Wildfires initially cause devastation to the environment, but are actually critical to future growth. The fire breaks down organic elements into nutrients that are then washed back into the soil by rain. The result is exceptionally fertile soil. Some seeds actually require fire to break their outside coating before they can germinate.

Email Evolution@northstargames.com with any questions, to get on our mailing list, or for the chance to test future expansions.
GAME CREDITS

Game Designers: Dominic Crapuchettes, Dmitry Knorre, Sergey Machin
Artist: Catherine Hamilton
Project Manager: Dominic Crapuchettes
Game Developers: Jonathan D’Angelo, Ben Goldman, Nick Bentley, Scott Rencher
Graphic Designer: Jacoby O’Connor, Ben Goldman
Card Layout Design: Giorgio De Michele
Rules: Dominic Crapuchettes
Editing: Jonathan D’Angelo, Edoardo Kulp, Kristen Rahman, Apinya Ramakomud, Ken Goldman, Giles Young
Scientific Advisors: Dr. Giles Young (Paleoclimatologist, Swansea University, UK), Dr. Joanne Demmler (Senior Data Analyst & Lecturer, Swansea University, UK), Dr. Stuart West (Professor of Evolutionary Biology, University of Oxford), Catherine Hamilton (Artist, Birder, Scientist, Super Genius)
Production Manager: Edoardo Kulp
Playtester Coordinator: Dominic Crapuchettes
Official Playtesters: John Lee, Dan Cain, Travis Morton, Jan Ivanauskas, Greg Cooksey, Adrian Koester, David Ahrens, David Chervony, Keith Abel, Nigel Buckle, Ariel Claure, Bryce Summers, Jonathan Brookbank, Liz Burton, Michael Burton, Pedro Goins, Randy Dykstra, Rex Moore, Tim Roza, Seth Locke,
Special Thanks to: Liz and Mike Burton for their work on the 2-Player Rules, Stevan Corrêa for creating some of the Scientific Names, to all our Kickstarter backers for believing in our dream, and to countless others on the BoardGameGeek.com for their passionate and insightful feedback.

GAME HISTORY

The original concept for Evolution was developed by Russian biologist Dmitry Knorre as a teaching tool for his students. Dominic Crapuchettes, a former professional Magic: The Gathering player, built upon the concept along with a design team at North Star Games to create a tournament quality board game. Catherine Hamilton was raised by a rocket scientist mom at NASA and a neurobiologist dad at Caltech. She joined the project because it merged her passion for natural science with her lifelong passion for watercolor painting.