Project title	DinoSpan
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DinoSpan

A competitive engine-building game about Dinosaur Evolution for 1 to 5 players

1 to 5 players | ~ 20 mins per player | Age: 10+

Introduction

DinoSpan is a competitive board game in which each player takes on the role of an **evolutionary Paleontologist researching** phylogenetic *relationships* between Dinosaur species.

Build your **own Evolutionary Atlas**, publishing studies on new species and making the most of each **Dinosaur**'s unique characteristics to score points, activate combos, and excel in the race for **Academic Goals**.

The game combines *engine-building*, *combos* and *set-collection* in a scientific setting: optimize your paleontological engine and explore the most amazing evolutionary relationships!

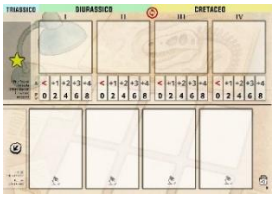
At the end of the game, the player with the most **Prestige Points (PP)** receive the "*Best Paleontologist of the Year*" award (and wins the game).

Prestige Point (PP) is obtained through:

1. **Dinosaur Cards**: Each species published in your **Evolutionary Atlas** provides **PP.**
2. **Eggs** laid: each **Red Egg** is worth 1 **PP,** each **Golden Egg** 3 **PP.**
3. **Academic Objectives**: Compete on the criteria related to the **Key Species** in each round.

Components

1 Mesozoic Board
(Central)



140 Dinosaur Cards
(16 Triassic; 54 Jurassic; 70 Cretaceous)

20 Action Marker
(in 4 colors, 5 x player)

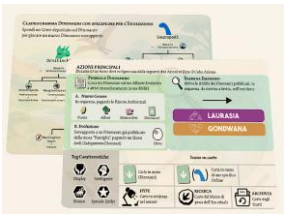
5 Paleo Atlas
(1 x Player)

75 Eggs
(50 Basic, 15 Advanced)

15 Bio-Resource Trackers
(in 3 colors, 3 x player)

14 Academic Objective tiles
(in 4 types)

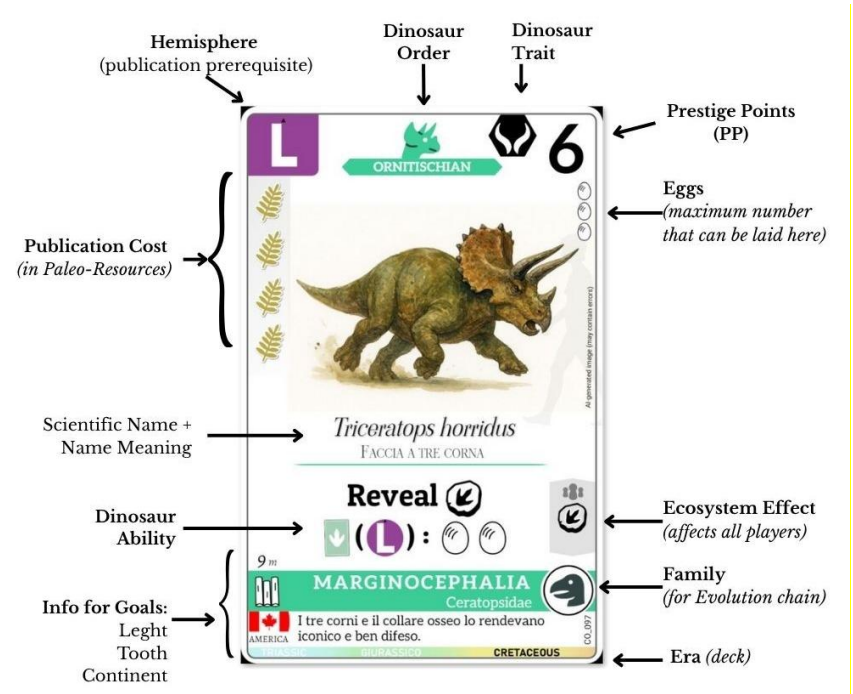
***5 Player* AID**



20 Goal Cubes
(in 5 colors, 4 x player)

1 Rulebook

1 First Player **Token**

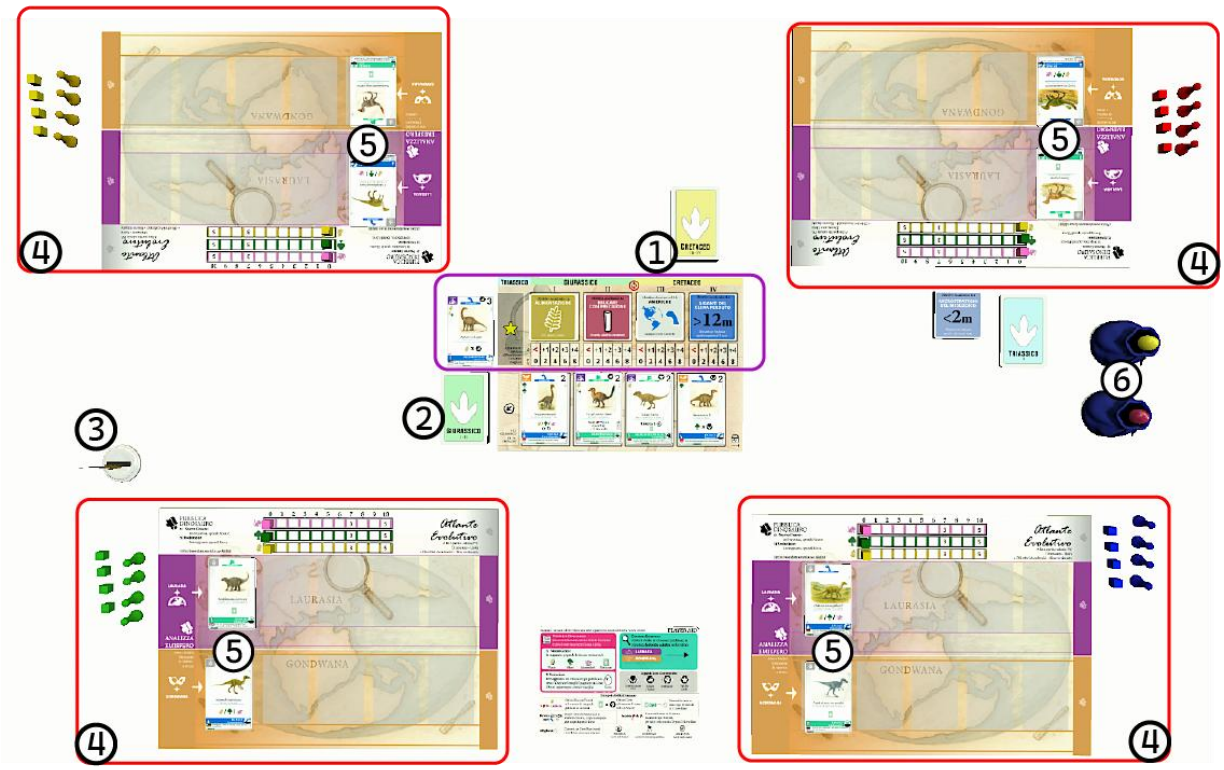


Dinosaur Orders

	**Ornitischian**
	**Sauropod**
	**Theropod**

Game Setup (*Triassic Era*)

1. **Select Key Species**: Draw 1 random card from the **Cretaceous deck** and associate 4 **Academic Objectives** so that they matched with any characteristic traits of the **Key Species** by setting one for each of the 4 rounds. (*See the Academic Goals section for details and examples*)
2. **Prepare Jurassic Transaction:** Shuffle the **Jurassic deck**. Draw 4 Dinosaur cards and place them face up on the **Mesozoic Board**. There are the Dinosaurs in **Hype** ( ).
3. **Turn Order:** The player who has most recently seen a bird becames the First Player for Round I.
4. **Each player** receives:
    a. 1 **Paleo Atlas board** (place it in front of you);
    b. 3 **Bio-Resource Trackers** (set to level 0 on the respective tracks: *Plants, Trees, Mammals);*
    c. N. 5 **Action Marker** (place them beside your board);
    d. N. 4 **Goal Cubes** (place them beside your board);
    e. N. 2 **Dinosaur cards** from the ***Triassic deck***.
    (For your first game: Take 1 Ornithischian and 1 Sauropod. See Advanced Game section for alternate starting hands)
5. **Triassic:** In turn order (clockwise), each player freely Publishes their two Triassic Dinosaur cards into **two different Hemispheres** of their Paleo Atlas (one in Laurasia and one in Gondwana). **Immediately activate** the Ability of each published Dinosaur.
6. **Egg supply**: Create a Egg supply accessible to all players, including both **Base** and **Advanced Eggs**.



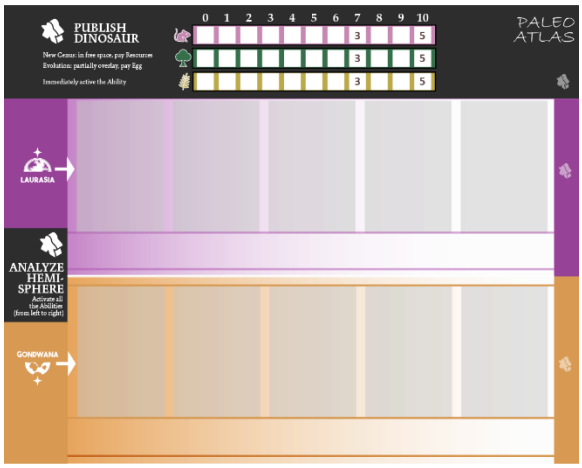
Example of setup for 4 players

Game Overview

Game Flow

A game of **DinoSpan** is played over **4 rounds**, each consisting of **4 turns**.

In turn order (clockwise), players use one of their **Action Marker** to perform one of the following **Main Actions**:



A) **Publish a Dinosaur** to your **Paleo Atlas**, immediately activating the Ability of the published Dinosaur. *(See **Publish a Dinosaur** for more details)*

B) **Analyze a Hemisphere** (choose either *Laurasia* or *Gondwana*), activating in sequence all Abilities of the Dinosaurs published in that Hemisphere (**from left to right**). *(See **Analyze a Hemisphere** for more details)*.

The game continues in this way until all players have used their **4 Action Markers**, completing **4 Main Actions** each round.

At the end of the round, the current **Academic Goal** is evaluated. Each player marks the **Prestige Points (PP)** they've earned with their **Goal Cube**, and the game proceeds to the next round. *(See End of the Round for more details.)*

The game continues until the end of the **fourth round**, when final scoring is carried out to determine the winner. (See *End of the Game and Scoring* section.)

End of the Round

A round ends once all players have placed all their 4 Action Markers.

Then, follow these steps in order:

1. **Evaluate the Academic Goal:** Each player counts how many Dinosaur cards meet the requirements of the **Academic Goal** for the round.
2. **Assign Prestige Points (PP):** The player with the lowest score (fewest valid Dinosaur cards published) places their Goal Cube on the **"0 PP"** space. In case of a tie for the lowest score, all tied players score 0 PP.
3. The **First Player Token** passes to the player who scored 0 PP this round. If there's a tie, it goes to the one sitting farthest clockwise among them.

4. **Distribute Goal Cubes:** All other players place their **Goal Cube** according to the point difference between their result and the lowest score. Each point of difference corresponds to a higher reward, based on a predefined scale:

5. **Recover Action Tokens:** Each player retrieves their 4 Action Tokens from their Paleo Atlas.
6. **Advance the Era (if applicable):** If the next Academic Goal corresponds to Round III, replace the **Jurassic deck** with the **Cretaceous deck**.
7. **Refresh Dinosaurs** in **Hype** (🐔)**:** Refill the **Dinosaurs** in **Hype** area (🐔) on the Mesozoic Board with new cards from the current Era deck.

End of the Game and Final Scoring

At the end of the fourth round, after resolving the last Academic Goal, proceed with final scoring:

Each player adds up their **Prestige Points (PP)** from the following sources:

- **Published Dinosaur Cards:** Each card displays a number of PP in the upper right corner. Only visible PP are counted toward the final score. *(See Evolution for details about Dinosaur PP visibility)*
- **Laid Eggs:**
  - Each **red Egg** is worth **1 PP**.
  - Each **golden Egg** is worth **3 PP**.
- **Academic Goals**: Each player's Goal Cubes remain on the scoring track to show the PP earned across the four rounds.
- **Bio-Resources**: The Leftover Bio-Resources (*Plants, Trees, and Mammals*) grant bonus PP as shown on the Paleo Atlas:
  - More than 7 units of a resource = **3 PP**
  - Reaching the maximum level (10) = **5 PP**

The player with the most **Prestige Points (PP)** is declared *Palaeontologist of the Month* and wins the game. In the event of a tie, the winner is the tied player seated furthest clockwise from the First Player.

Final Scoring Example

- Published Dinosaur Cards: 31 PP
- Laid Eggs: red Egg 7 PP + golden Egg 6 PP
- Academic Goals: 6 PP
- Bio-Resources: 3 PP *(Plants)*

Total score: 46 PP

Main Actions

On your turn, place one Action Marker to perform one of the two Main Actions:

A) PUBLISH A DINOSAUR

1. Place an Action Marker at the top of your Paleo Atlas;
2. **Play a Dinosaur card from your hand** into your Paleo Atlas, in the matching Hemisphere *(as show in the upper left corner of the card)*, using one of the **two following methods**:

Remember: in both cases, you must **immediately activate the Ability** of the newly published Dinosaur.

A1. New Genus

1. Place the card in the **next available *space*** in the correct Hemisphere *(from left to right)*.
   (If there are no available spaces left, you cannot publish your Dinosaur using this way, see Evolution method.);
2. **Pay the required resources as indicated on the Dinosaur card:**
   a. If the cost includes *Plants*, *Trees*, or *Mammals*, adjust your Bio-Resource Trackers accordingly.
   b. If the cost includes *Dinosaur* cards, discard the required number of cards from your hand to the discard pile (*Archived*).
3. **Immediately active the Ability** of the newly published Dinosaur.

A2. Evolution

Alternatively, you may Publish a new Dinosaur through Evolution (Evolutionary Studies).

During the game, you may Publish a new Dinosaur by **evolving a species** already present in your Paleo Atlas, that is, by **partially overlapping** a new Dinosaur card (*Evolved*) onto a previously published Dinosaur card (*Parent*), as long as the following conditions are met:

1. **Phylogenetic Link**: The *Evolved Dinosaur* must belong to the same **Order** and the same **Family** as the *Parent* card, as specified by the **Evolution icons** on the card.
   Note: "Basal" Dinosaurs are always valid as Parent species within the same Order for Evolution purposes. (For more details, see the section *Dinosaur Phylogenetic Tree.*)

2. **Pay an Egg**: The *Parent* card must have **at least 1 Egg** on it, which must be returned to the general supply. Any additional Eggs on the *Parent* card are **inherited** by the *Evolved card*.

3. **Activate the Ability** of the newly published Dinosaur (only the ***Evolved*** Dinosaur activates its Ability).

The *Evolved Dinosaur* card is **partially overlaid** on top of the *Parent Dinosaur* card already present in your Paleo Atlas. The player may choose between **two overlay options**, depending on the strategy they wish to pursue:

LOW Overlay (Top part of the Parent card remains visible) Keep visible the **Prestige Points (PP)** and the **Trait icon** from the Parent card. *In this example, 3 PP and the Display icon from the Parent card remain visible.*	
HIGH Overlay (Bottom part of the Parent card remains visible) Keep visible the **Ability** of the Parent Dinosaur. *Useful if you want to activate both Abilities in combo Parent + Evolved (the activation order is up to the player).*	

B) ANALYZE HEMISPHERE

1. Place an **Action Marker** at the beginning of one of the two Hemisphere rows (*Laurasia* or *Gondwana*).
2. Move the **Action Token** **from left to right**, sequentially activating the Abilities of the Dinosaur cards published in that Hemisphere.

Each Hemisphere contains 5 spaces where Dinosaur cards can be published.

Using the **Evolution** mechanic, it is possible to have up to **2 Dinosaur cards** in the same space *(See Evolution section).* If both cards in a space (*Parent* and *Evolved*) have visible Abilities, the **activation order is up to the player**.

DINOSAUR ABILITIES

Each Dinosaur card has a **unique Ability** that allow you to gain resources (Dinosaur cards, Bio-Resources or Eggs) and to convert one type into another.

Dinosaur cards already published in that Hemisphere may cause the active player to perform one or more of the following micro-actions, depending on the Ability being triggered:

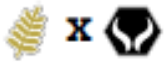
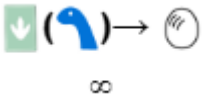
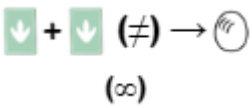
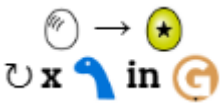
- **Gain Bio-Resources** (*Plants*, *Trees*, or *Mammals*) by advancing the corresponding tracker;
- **Draw Dinosaur cards** from:
    - the *Footprint* (Era deck),
    - the *Hype Zone* (market)
    - or the *Archive* (discard pile).
- **Lay Base Eggs** (red) or **Upgrade Eggs** into *Advanced Eggs* (gold).
- **Convert** one resource into another.

The following are some **important rules** about how Abilities are resolved:

- **Activating a Dinosaur's Ability is mandatory.**
  Some cards feature **two effects**: a primary effect and a secondary **ecosystem effect** that grants resources to the other players.
  If you cannot, or choose not to, perform the **primary effect**, you must resolve the **secondary (ecosystem) effect** instead.
- The **Featured Dinosaurs** on the Mesozoic Board are refreshed each time the Action Token moves to the next space.
- When an action allows you to **draw cards from the Footprint deck**, any cards you choose not to keep may be returned to the **top of the current Era deck** or **discarded to the Archive.**
- Each **Bio-Resource** (*Plants*, *Trees*, *Mammals*) has a **maximum limit of 10** units (as shown on the trackers of your Paleo Atlas);
- The number of Eggs you can store depends on the Dinosaurs you have published. Each Dinosaur card indicates how many Eggs it can hold, typically between 1 and 3.
- There is no hand limit for Dinosaur cards.

Dinosaur Ability Examples

Below is a list of sample Abilities that you may find on Dinosaur cards:

 **Gain 1 Bio-Resource:** choose 1 Plant, 1 Tree, or 1 Mammal.	 **Gain 1 Dinosaur card** from the Hype Zone (or from the Footprint deck).	 **Gain cards equal to the number of Ornithischians** published in Gondwana.
 **Gain Plants** equal to the number of Dinosaurs with the **Display** tag.	 ***(You may place the other card on top of the deck or in the Archive.)***	 Discard 2 cards from Hype. Refresh the Hype Zone. Then take 1 card.
 Reveal the bottom 2 cards of the Archive. Take 1.	 Draw 2 Dinosaur cards from the deck. Lay 1 Egg for each Sauropod revealed.	 Discard Theropod cards from Hype. Lay 1 Egg for each Theropod discarded.
 If there's 1 Ornithischian, 1 Theropod, and 1 Sauropod in Hype, lay 1 Egg.	 If the top card in the Archive is a Theropod, lay 2 Eggs.	 Discard 1 Sauropod card from your hand to lay 1 Egg. Repeat as many times as you like.
 Discard 2 Dinosaur cards of different Orders from your hand. If you do, lay 1 Base Egg. Repeat as many times as you like.	 Reveal the top card of the current Era deck. If it's a Dinosaur from Gondwana, lay 2 Eggs.	 Convert 1 Base Egg into 1 Advanced Egg. Repeat for each Sauropod in Gondwan

ACADEMIC GOALS

In *DinoSpan*, **Academic Goals** (or simply Goals) represent the evolutionary research guidelines that paleontologists compete to fulfill in order to gain **Prestige Points (PP)** at the end of each round.

If this is your first game of DinoSpan, use a preset **Introductory Scenario** (see Introductory Scenario section).

The Academic Goals are divided into **4 categories**, each based on a specific research trait and marked on the back by the **Paleontology Research Center** funding that study. The categories are as follows:

Paleontology Research Center	*Goals category*	*N. variants*
IVPP – China	Dinosaur **Size**	4
NHM – UK	Dinosaur **Distribution by Continent**	3
UNIGE – Italy	Dinosaur **Dentition (Tooth)**	4
AMNH – USA	Dinosaur **Feeding Type (Food)**	3

To set up the Academic Goals for a s**tandard game**:

1. **During setup**, draw a random Dinosaur card from the **Cretaceous deck**. This card becomes the **Key Species**, the reference species for all Palaeontologists in this game.
2. **Select one Goal tile** from each of the 4 Research Centers, choosing the tile that matches the corresponding trait of the **Key Species** (*Size*, *Continent*, *Dentition*, *Food*).
3. **Place the 4 selected Goal tiles** onto the designated spaces of the Mesozoic Board in **descending order** based on the percentage (%) printed in the lower right corner of each tile.

Note: The **percentage (%)** shown on each Goal tile indicates the proportion of Dinosaurs of that type **present in the game.**

Each Dinosaur card creates a different scenario for your game. With over 100 possible combinations, **feel free to experiment**!

Introductory Scenarios

Introductory Scenarios are suggested setups for the Academic Goals. They can be useful both for your first games and as a **reference example** when setting up Goals during games that use the semi-random selection method.

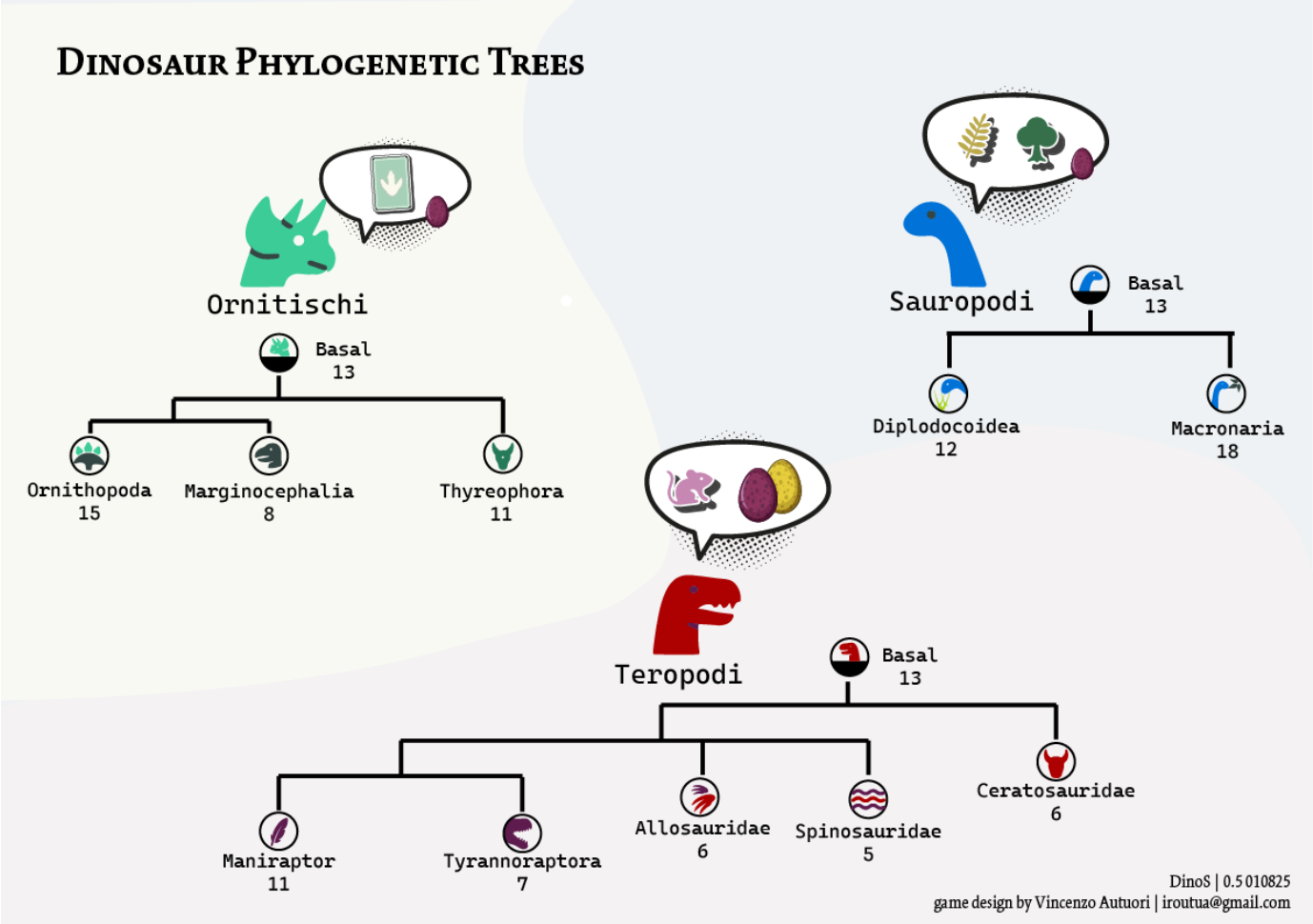
Scenario 01 | Triceratops horridus

	**Period:** Maastrichtian (Late Cretaceous, 66 Ma) **Discovery Site:** Hell Creek Formation (North America) **Order:** Ornithischia | **TAG:** Display **Diet:** Herbivore | **Teeth:** Dental battery (B) | **Size:** ~ 9 meters
Narrative Introduction	In the vast plains of the terminal Cretaceous, survival wasn't the only force driving evolution. Reproductive success was won through longer horns, more elaborate frills, and silent challenges among members of the same herd. **Triceratops** embodies a turning point in evolution: visual communication becomes a tool of selection. In this scenario, you will explore the role of visual display among giant herbivores, studying the connection between structure and behavior — and how beauty, even among dinosaurs, could save a species.
Scientific Focus	• Evolution of horns and bony frills in ceratopsids • Sexual selection and intraspecific recognition • Visual display and silent communication
Ecological Connections	This scenario is inspired by studies on **sexual selection in vertebrates**, such as **antlers in deer**, **tail feathers in peacocks**, and **crests in chameleons**. Elaborate structures are not just for defense — they are **visual messages**, keys to reproduction, hierarchy, and coexistence. **Triceratops** shows us that, even among giant herbivores, form carried deep meaning.
Academic Goals	1. **Food**: Ground-Plant Feeders (47) 2. **Continent**: Giants of the New World (45) 3. **Size**: Giants in Motion (23) 4. **Tooth**: Complex Dentition (19)

Scenario 02 | Velociraptor mongoliensis

	**Period: Late Cretaceous** **Discovery Site:** Gobi Desert (Asia) **Order:** Theropoda | **TAG:** Intelligence **Diet:** Carnivore | **Teeth:** Ziphodont | **Size:** < 2 m
Introduzione narrativa	In the heart of the Cretaceous, among the shifting dunes of the Gobi, move the silent shadows of intelligent predators. The **Velociraptor** is not merely a feathered war machine — it is a social, strategic, and adaptable creature. Modern studies suggest it may have hunted in small groups, using **visual signals**, **coordinated positions**, and the **instincts of a pack**. In this scenario, you'll follow the fossil traces of **predatory cooperation**, **tactical intelligence**, and **evolutionary miniaturization.** Can you follow in the footsteps of those who survived not by strength — but by cleverness?
Focus Scientifico	• Social behavior in dromaeosaurids • Convergences between non-avian dinosaurs and modern birds • Predatory intelligence and visual communication • Evolutionary miniaturization as a resilience strategy
Collamenti Ecologici	This scenario is inspired by comparative studies on modern predator behavior (e.g., wolves, crows, orcas) and paleontological hypotheses about dromaeosaurids. **Intelligence**, **sociality**, and **visual signaling** are key traits in ecological resilience today — *DinoSpan* invites you to search for them in the past.
Academic Goals	1. Masters of Miniaturization (29) 2. Food: Carnivorous (28) 3. Tooth: Blade of Evolution (26) 4. Eastern Frontiers (24)

DINOSAUR PHYLOGENETIC TREE



ADVANCED GAME

Advanced Triassic Setup

(Work in progress)

Personal Research (Private Goal)

(Work in progress)

SOLO MODE

(Work in progress)

NOTE