**Phylo**

**PHYLO:** The Trading Card Game celebrates ecosystems in all their awesomeness. It showcases the many wonderful, weird, and wacky species that live on our planet Earth. It also deals with some serious threats to ecosystems like wildfires, oil spills, and climate change.

**ECOSYSTEMS** are communities of species who interact with one another and interact with a common environment. An environment is defined by its **TERRAIN** and **CLIMATE.** When many different species make up a particular ecosystem, we say that the ecosystem is rich in **BIODIVERSITY.** Biodiversity is a good thing because it makes ecosystems more stable and resilient to threats.

The **PHYLO** Ecosystem Game allows players to use their **PHYLO** cards to build food chains, create stable ecosystems, sabotage opponents’ ecosystems, and rack up points in the process. The game is flexible, and we encourage you to modify and play by your own house rules. For detailed rules, more gameplay options, and hundreds of free printable PHYLO cards, check out our website at www.phylogame.org.

---

**THIS IS A PHYLO CARD!**

1. **COMMON NAME:** the simple, everyday name for a particular species.

2. **LATIN NAME:** the scientific name for a species, often used in research.

3. **POINTS VALUE:** the number of points that the card is worth.

4. **CARD TEXT:** may provide additional information on how the card can be played, along with a cool fact about the species.

5. **LEGAL STUFF:** PHYLO cards are licensed under Creative Commons Attribution-NonCommercial-NoDerivs 2.0 Generic. This means that anyone can share, copy, and freely distribute the cards, so long as credit goes to the artists and the card images aren’t used for commercial purposes. Exceptions to these rules belong only to the artists and to the deck’s official host.

6. **ARTIST INFORMATION:** this tells you who did the artwork on the card and where you can find more of their work. **Note:** that this deck is hosted by Dinosaurs Unearthed (http://www.dinosaursunearthed.com/)

7. **SCALE:** the size of the species. Carnivores and meat-eating omnivores may only eat species of equal or lesser scale. Herbivores and plant-eating omnivores may eat species of any scale. Full details about species’ scale value can be found at phylogame.org/glossary

8. **FOODCHAIN#:** the species’ relative position in its food web. Autotrophs such as photosynthetic plants are always FOODCHAIN#1. Herbivores, omnivores and carnivores will tend to have higher FOODCHAIN numbers, depending on where they fit in the food web.

9. **DIET:** the type of food a species eats. See colour legend above, but note that the black colour generally means you should read the card text for specific details...

10. **CLIMATE:** the climate preference of the organism: cold, cool, warm, or hot. An organism may have multiple climate preferences.

11. **TERRAIN:** the geographical and geological conditions of an organism’s habitat. Essentially, where the organism lives (see icons below). An organism may have multiple terrain preferences.

12. **PERIOD:** As this deck has extinct organisms, we have included information on their corresponding geological period(s). All species cards in this deck are compatible with each other here (they all existed during the Jurassic Period), but note that some organisms also thrived in other timescales. This information is included in case, there are other decks that can be combined with this one.
THE PHYLOMON ECOSYSTEM GAME!

**Age:** 8 years old and up.

**Game Duration:** Approximately 20-30 minutes

**Number of players:** 2

**Deck Requirements:** Each player will need a deck of about 20 to 25 cards, which should include one HOME card each, as well as a mixture of SPECIES and EVENT cards. These decks you can build yourself, or you can use a “starter” deck such as the one you have bought (or one of several that you can download at phylogame.org). For these “starter” decks, you can take out the two HOME cards, and shuffle the rest between the two players.

**Quick Instructions:** Two players sit across from one another at a table. At the start of the game, each player places his or her HOME card on the table. HOME cards should be placed adjacent to one another, facing in opposite directions (see right). Each player's remaining cards may be kept face-down in a pile (called the PICK-UP pile). Players should also reserve a spot on the table for their discarded cards (called the DISCARD pile).

Players draw 8 cards from their respective PICK-UP piles to form their hand. The PHYLO Ecosystem Game is played in turns, and players may play rock, paper, scissors, to determine who will go first.

On each turn, a player will draw 1 new card from their PICK-UP pile and may take 3 of the following ACTIONS (any combination):

- **PLAY** a card from your hand onto the table (SPECIES or EVENT card - see Playing a Card).
- **DROP** one card from your hand into a DISCARD PILE and PICK UP three new cards.
- **MOVE** a SPECIES card (see Moving a Card).
- **PASSING** (essentially to end their turn).

**Playing a Card:** It is important that players continue to place their own cards on the table “facing them” (and opposite to their opponent). This allows players to keep track of their own cards. Note that players may play cards adjacent to both their own or their opponent’s cards.

SPECIES cards may only be placed next to cards which share at least ONE common CLIMATE and ONE common TERRAIN. Species which share a common CLIMATE and TERRAIN are said to be environmentally COMPATIBLE.*

SPECIES cards must also be foodchain COMPATIBLE. FOODCHAIN#1 cards can be played anywhere, so long as they are placed in an environmentally COMPATIBLE manner. Note that any FOODCHAIN#1 card may be played adjacent to a HOME card.

In general, FOODCHAIN#2 cards (a herbivore for instance) must be placed adjacent to at least one FOODCHAIN#1 card. FOODCHAIN#3 cards which are carnivores (meat-eating, as indicated by a red circle) may be played next to at least one FOODCHAIN#2 prey of equal or smaller SCALE (i.e. it can’t eat something bigger than itself, unless specified in the card text). Omnivores (FOODCHAIN#3, brown circle) may be played next to SPECIES which are FOODCHAIN#2 (meat) or FOODCHAIN#1 (plant). It’s also a good idea to read the card text (especially if the diet is a black circle), as specific instructions regarding FOODCHAIN connections may be provided (i.e. the organism has exceptional diet needs).

Also note that played cards do not have to be COMPATIBLE to ALL adjacent cards. As long as there is one compatible card, such that at least one viable food chain can be traced back to a FOODCHAIN#1 card, then you’re good to go.

**EVENT cards** may be played as directed by instructions on the card. Unless otherwise specified, EVENT cards take immediate effect, and are then removed from the table and placed in the DISCARD pile.

EVENT cards will often result in cards that are INCOMPATIBLE to all adjacent cards (i.e. no shared CLIMATES or TERRAINS, and no proper FOODCHAIN connection). If so, the affected player has only their next turn (i.e. next 3 ACTIONS) to react to an EVENT before any of these newly INCOMPATIBLE SPECIES cards are removed. These players may choose actions to play new cards that replenish broken food chains, and/or MOVE affected cards to COMPATIBLE areas on the table. Any cards that cannot be saved after this reaction turn must be placed in the DISCARD pile.

**Moving a Card:** MOVE# (located in the card text) indicates how many places a species may move per action. Species can be moved up, down, left, or right, and must be played in an open spot, adjacent to at least one other COMPATIBLE card on the table. Birds, insects, and other organisms that travel by FLIGHT may also move along a diagonal path. Like before with EVENT cards, any card made INCOMPATIBLE due to a MOVE is only discarded if the card is still INCOMPATIBLE after the affected player has been given his/her turn to react.

**Ending the Game:** When a player picks up his/her last card from their PICK-UP pile, then that player will finish his/her turn, and their opponent will then also play their one last turn. At that point, the game ends, UNLESS an EVENT card or a MOVE is played resulting in INCOMPATIBLE cards during that last turn – essentially, when this happens, the other player always has the right to react by getting one extra turn. In the end, players will then add up all points that remain on the table player with the most points wins.

**Keywords:** Note that some cards will have special keywords. These can be ignored or played as described at the website’s glossary (phylogame.org/glossary). For instance, the INVASIVE keyword, allows a player to play a card directly on top of (and thereby discard) a similar SPECIES card.

**Optional Rule:** Sometimes, cards which are compatible in the game are not actually compatible in real life. This might be because, despite sharing compatible terrains and climates, species may actually live in different areas of the world. As well, some species may have highly specialized diets and eat only a limited selection of things in the wild.

Because of this, some players choose to include a CHALLENGE or “call your bluff” rule. With this rule, players may challenge strange or questionable SPECIES connections (just as one would challenge a misspelled word in Scrabble). We recommend using Wikipedia (www.wikipedia.org) or the Encyclopedia of Life (www.eol.org) to verify real-world species compatibility.

The player that wins the “call your bluff” CHALLENGE may subsequently remove any card from the table with immediate consequences. For more gameplay options, check out our website at www.phylogame.org!

* Note that cards also need to be compatible in terms of geological timescale. In this deck, all cards are within the Jurassic Period, but do keep this additional piece of information in mind, if you mix decks.