# **ECOSYSTEM IN BALANCE**

### Inside the game box you will find:

	1	Game board (6 pieces)
	1	Tower (54 pieces)
00 000	1	Box with 54 impact cards (!) and 18 question cards (?)
	1	Die
8	5	Pawns
	1	Sand timer

## About the game:

The objectives of the **ECOSYSTEM IN BALANCE** game are:

- To learn about the exotic invasive species in continental aquatic ecosystems.
- To raise awareness about how human activity contributes to the presence of invasive species and how these species can destabilise the aquatic ecosystems they inhabit.

This board game accompanies the *Guia d'espècies invasores d'ambients fluvials* produced by the Gerència de Serveis de Medi Ambient of the Diputació de Barcelona as part of the *Va d'aigua programme*.





The teams represent people whose actions destabilise an ecosystem. The ecosystem is symbolised by a tower made up of 54 blocks, in 6 different colours.

Each colour represents a different category of species:

- Green: trees, shrubs, and large grasses
- Yellow: lianas and large herbaceous plants
- Orange: crustaceans and molluscs
- Blue: predatory fish
- Purple: competing fish and fish that contribute to habitat degradation
- Red: reptiles, birds, and mammals

The board is divided into squares and forms a circuit around the continental aquatic ecosystem.

There are two types of square corresponding to the two types of card; **impact squares (!)** and **question squares (?):** 

- Impact cards (!): The cards describe a human action that introduces an invasive species and explain the effects/impacts of introducing that species. Lastly, the cards state that the action has destabilised the ecosystem and, as a result, a block in one specific colour must be removed from the tower.
- Question cards (?): The cards contain questions on the content of the Guide. They
  describe specific situations that can occur in continental aquatic ecosystems and offer
  multiple-choice answers.

#### Preparing to play:

• The teacher introduces the main contents of the *Guia d'espècies invasores d'ambients fluvials* and explains how to play the game.

You can consult the *Guia d'espècies invasores d'ambients fluvials* here: diba.cat/web/mediambient/especies-invasores

You'll also find a slideshow that introduces the main contents of the Guide to the class.

• To reinforce students' knowledge of exotic invasive species, when the teacher has finished the presentation, the class should be divided into groups to simultaneously play the **ECOSYSTEM IN BALANCE** and **INVASIVE SPECIES PAIRS** games.

#### **Game instructions:**

- Each game can be played by a maximum of 5 teams (maximum 2-3 people per team).
- The parts of the game should be arranged as follows:
  - o **Game board:** assemble the 6 pieces like a puzzle to form a hexagon with a hole in the middle.
  - o **Tower:** create a vertical structure with the 54 blocks (9 in each colour) at the centre of the game board. Each level must be made up of 3 blocks, alternating their direction. The levels do not need to be made up of the same colour blocks.
  - o **Card box:** remove the cards from the box, separate the impact cards from the question cards, and place them face down beside the board.
  - o Pawns: each team is allocated a pawn, and places it the start square.
  - o **Die and sand timer:** should be placed to one side of the board.
- Each team rolls the die. The team with the highest number goes first. Play continues in a clockwise direction.
- The first team rolls the die and moves their pawn along the number of squares indicated by the die, in a clockwise direction.
  - o If the team lands on an impact square (!), the team to their right takes an impact card (!) and reads it out loud, indicating which colour block must be removed from the tower. The sand timer is turned over to indicate the time allowed for the team to remove the block. If the tower does not collapse, play moves to the team on their left.
  - o If the team lands on a question square (?), the team to their right takes a question card (?) and reads it out loud. The sand timer is turned over to indicate the time allowed for the team to answer.
    - If the team chooses the correct answer, it does not need to remove a block from the tower and play moves to the team on their left. If the incorrect answer is chosen, the team must take another turn.

ATTENTION! If you show the question to another team, remember to cover the answer.

• The team that makes the tower collapse, loses.