Our game is designed to teach the players the concept of common pool resources and the tragedy of the commons. The players sit around a box containing a number of animals. The players are told that each animal they collect is worth a point and the person with the highest number of points wins. Furthermore, they are told they play a certain number of rounds.

The expected behaviour of the players is that in the first round they collect all the animals. However, since there are no more animals left in the system, they are unable to reproduce meaning that there will be no replenishment of animals in the next round. Therefore, the game then stops.

The players will not know beforehand how many rounds they will play since then they can show strategic behaviour, letting all the animals live for each round but the last and then collecting them all.

The second round the game starts all over, but the players are now allowed to communicate before the start of the game, not during the game. Furthermore, instead of taking animals out of the bowl, they now have to write down how many they want to take and not share this information with the other players.

We expect some teams to be honest and make sure there are animals left to reproduce for the next rounds, however they will still take too many animals on average. When a player takes all animals and thereby disregards agreements made with other players, they will learn that you are dependent on the actions of others and the tragedy of the commons can still easily happen.

Apart from hearing their actual score at the end, the players will also be told what their maximum score could have been when they had let the animals reproduce.

The game can be further expanded by adding more rounds introducing more of the concepts regarding the management of Common Pool Resources as for example described by Ostrom[[1]](#footnote-1). However, due to the time constraints of this assignment these are not implemented.

The purpose of the game is to teach people the reasoning behind the concept ‘Tragedy of the Commons’ and to experience how easy it is to overlook the possibility of this concept occurring in reality.

The intended audience of the game is “normal” people. Not stakeholders or knowledgeable people. The game can be played with about 3 – 6 players. Less players will probably resolve into less tragedies. More people will be harder to manage. The players will play as themselves.

The objective of the game is to reach the highest score without dying.

The game will be a physical game but could easily be implemented as a computer game. The concepts of the game are realistic but the world it is set in is fictitious.

Players are not always allowed to communicate, depending on the stage of the game.

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| --- | --- |
| **Choice** | **Explanation** |
| Purpose |  |
| Insights obtained |  |
| Plot |  |
| Players |  |
| Roles |  |
| Objective in game / incentive |  |
| Rules |  |
| Representation of physical system |  |
| Representation of inter-actor environment |  |

1. Ostrom, Elinor (1990). *Governing the commons: the evolution of institutions for collective action.* Cambridge University Press [↑](#footnote-ref-1)