



Fish game – Catch your food

A tool to introduce local and global ecosystems and biodiversity

Catch your food!

What the pike eats:

- ☐ plants
- ☐ snails
- ☐ other fishes

Where the persch lives:

- ☐ in the pool
- ☐ in the sea
- ☐ in the lake

to get your character, please answer the questions!

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Erasmus+

What is fish game?

Fish game will be a webgame for different age groups. It is introducing food chain and biodiversity via Ecosystem Services in Estonia. The action is taking place in lake Peipsi. Players have to choose the role to be a certain fish species. Fishes on the game area are trying to eat each other and also have to escape from the fisherman. The game is introducing fishing as Ecosystem Service and also teaches the different fish species and their habits.

Target groups

Target group of the methods:

- **Young adults.** The method involves active moving and orientation. It is also suitable for young adults with children. This method can be a family learning activity. Most of the target group is living in towns and they are interested in the outdoor activities that are possible to do with their family. These parents have higher education and they are comfortable with technology. They are concerned about the environment.
- **Environmental educational centres** – the target group who are also disseminating the games and tools and other environmental educational materials. These centres are also using these tools to organise their programmes.

Learning goal of the tool

The goal of the game is to learn **biological diversity and food chain of the lake Peipsi**. The aim is to teach the different plants and animals in the lake Peipsi. Which animals and plants depend on each other's etc. The educative aim is to teach different fish species and their food habit.

Learning goal is supporting to introduce following ecosystem services:

- **Provisioning services** are the products obtained from ecosystems such as food, fresh water, wood, fiber, genetic resources and medicines.
- **Habitat services** highlight the importance of ecosystems to provide habitat for migratory species and to maintain the viability of gene-pools.



Learning content

The learning content of the tool is:

- To introduce local and global ecosystems and biodiversity / how they are interconnected.
- To introduce different ecosystems and species.
- To use different knowledge and skills to protect biodiversity and to use it environmentally friendly.
- To develop a positive vision of environmental protection and environmentally friendly consumption.

Technical description for creating the game

The learning/serious goal

The goal of the game is to learn biological diversity and food chain of the lake Peipsi. The aim is to teach about the different plants and animals of lake Peipsi. Which animals and plants depend on each other's etc. The educative aim is to teach different fish species and their food habit.

Rules, player roles, main resources

The main rule is to catch food, to grow bigger and to collect points when you eat more on more. It can be multiplayer competition.

The lake is full of fishes and everyone wants to eat something or somebody. In the beginning of the game a player has a chance to select a character. But before it he/she has to solve some questions related to that character. For example, if she/he wants to select pike he/she has to answer three questions about the pike (it means the player has to test their knowledge about biodiversity before starting the game – like to a short quiz). It means that a player cannot be a pike in case he does not answer correctly to the three questions about a pike. She/he cannot be a pike and has to choose the next fish.

Player role is to catch some food and to grow bigger. Bigger player's character may eat also smaller fishes in its species like pikes do. But it is not so with breams or



rooster etc. It depends on the species who eats whom and what. The aim is to hunt other players fishes but also available food resources in the lake. Other resources – fishes, snails, frogs, small insects are not so valuable. In the lake there are also traps: nets and hooks. There is need to recognise the danger.

Main resources are:

- health or life points; each player has 3 life points (as bigger fishes may eat smaller fishes)
- available food resources which do not give many points (you can hunt other players but also available food resources which are not so valuable as other fishes).

Objects:

- nets and hooks;
- plants where to hide.

Core mechanic(s) and possible Dynamics

The game mechanism is that for survive in the game there is need to catch up food and other fishes and not to get to the traps. It makes progress towards victory.

The story, characters and game world (if any)

The story: „You are a little fish. You want to grow up. But to grow up you have to eat some food. As the life is unfair – somebody lost every day, your goal is to eat as much smaller fishes as you can. What do you think about it? Sounds delicious... So let's start – catch your food!"

Visual design and level design

Possible game screenshot:



This is only very draft idea. On the screen there should be more fishes. Some fishes are eating each other, some fishes are not.

Levels in the game:

1. Underwater world: start level, safe and no enemies and no food. Just watergrass and sand.
2. Underwater world in the light with other actors: if the player starts to play his/her character moves in the underwater worlds and discovers different animals, other characters.
3. Underwater world in the dark with other actors: in case the player enters to deeper there are less food and bigger fishes who wants to eat her/his character.
4. Underwater world in the grass: it is when the player escapes or wants to hide. But the grass area is like a labyrinth.

Platform(s), control scheme(s)

Hardware platform for the game are personal computer and smartphones. Operating system is Windows and cross-platform is HML5. Game controllers are keyboards or touchscreen.

Distribution model and marketing strategies (optional)

Main marketing will be done via educational networks. The link will be present in the lists of nature educational schools, environmental centres and also school network will be used. The game will be published in the website keskkonnaharidus.ee. Also, there will be article in the online newspaper bioneer.ee and maybe in the magazine "Eesti Loodus".



Impressum

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