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► **To cite this version:**

Jean Guillard, Wiklacz Alain, Perrod Ethan, Bocquet Thomas, Fabien Bourinet, et al.. Synchrony in whitefish stock dynamics: disentangling the effects of local drivers and climate. 15th International Symposium on Biology and Management of Coregonid fishes (ISBMC), Sep 2023, Evian-Les-Bains, France. 82, 2023, 10.4081/jlimnol.2023.2134 . hal-04583331

HAL Id: hal-04583331

<https://hal.science/hal-04583331>

Submitted on 22 May 2024

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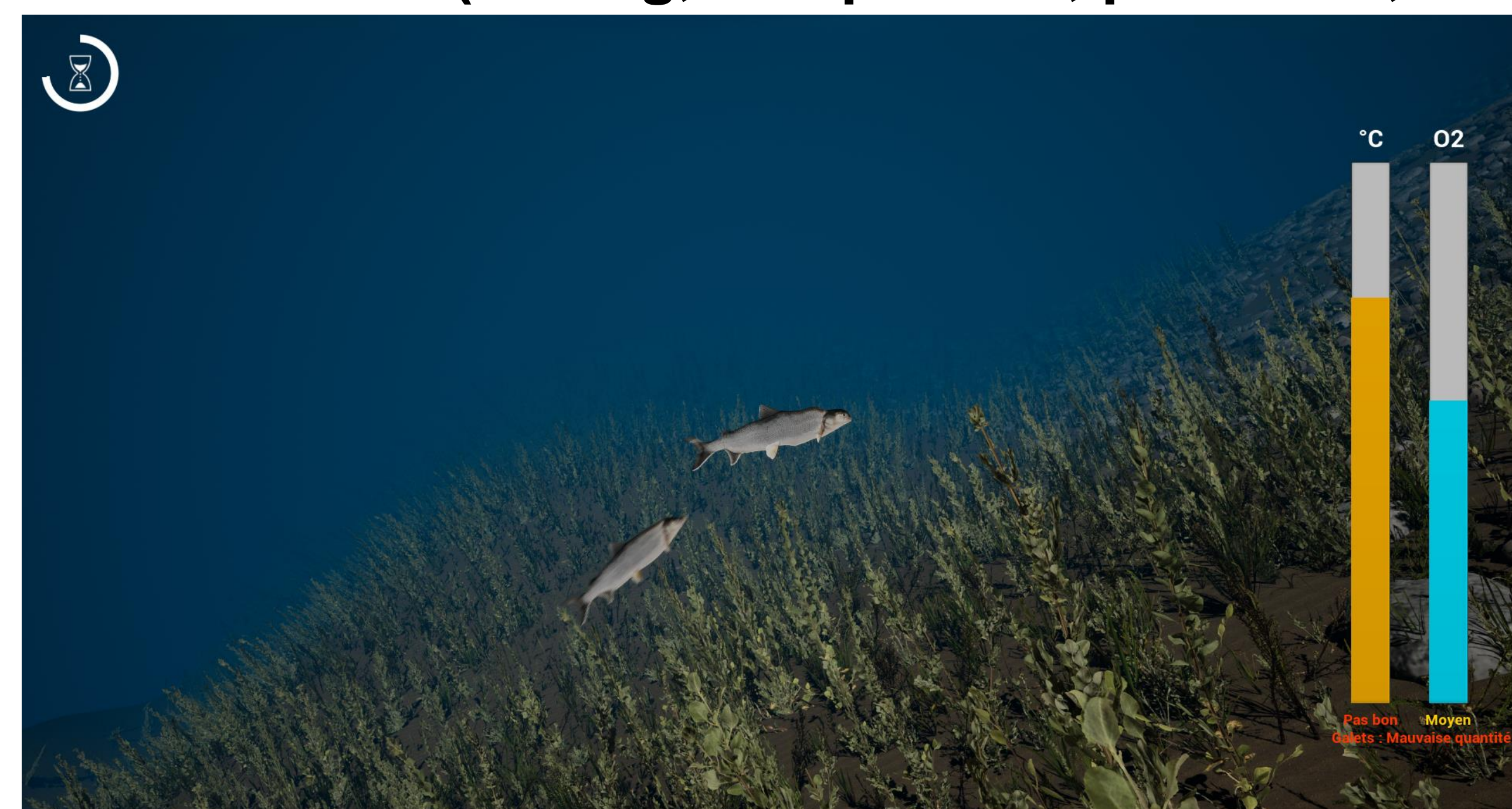
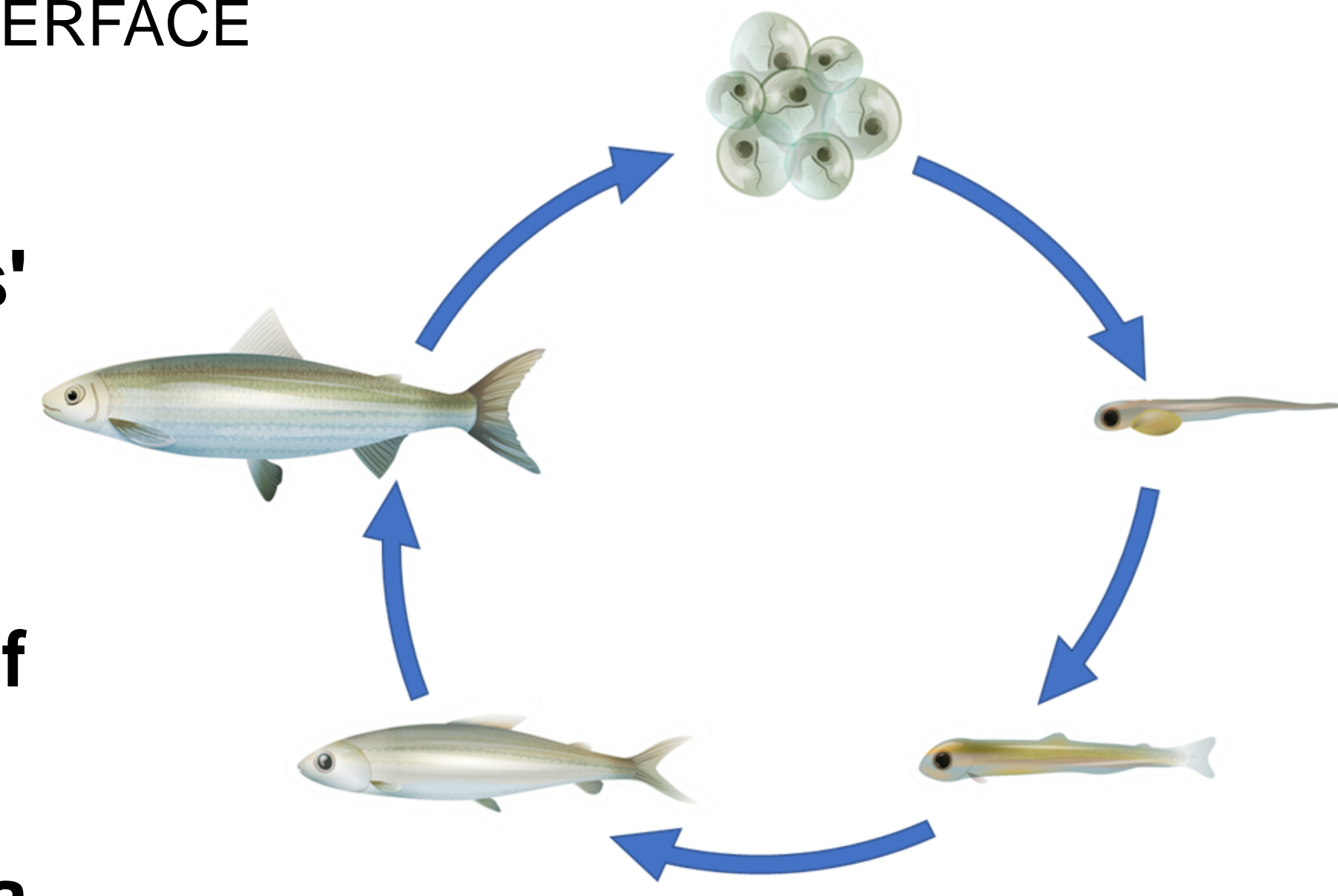
Féaventure, a video game to discover the life cycle of whitefish

Jean Guillard^{1*}, Alain Wiklacz¹, Ethan Perrod¹, Thomas Bocquet¹, Fabien Bourinet^{1,2}, Chloé Goulon¹
 1 – CARRETEL(Univ. Savoie Mont Blanc - INRAE) , 2- SCIMABIO INTERFACE



Introduction

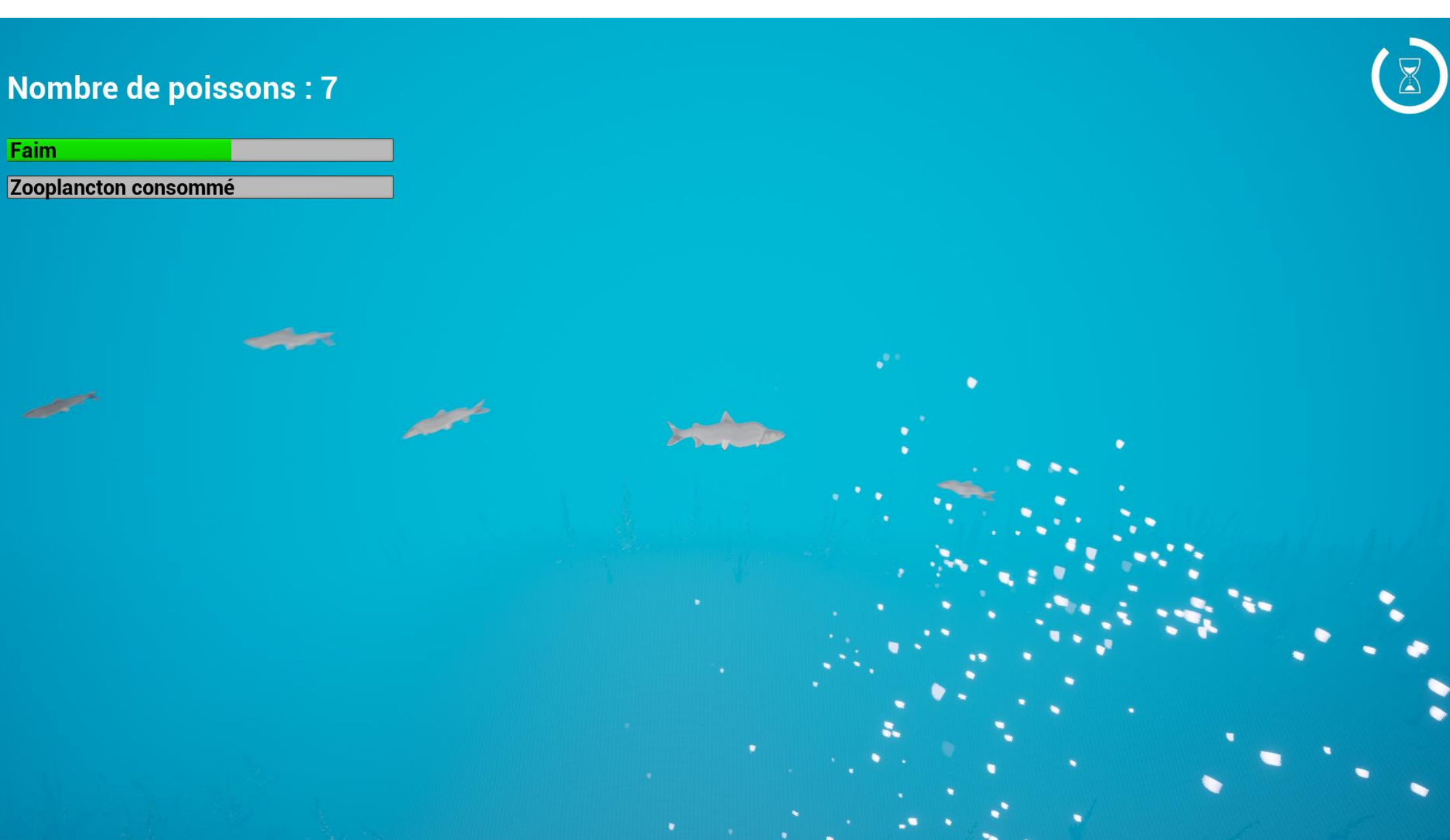
- Serious games : convey information, teach concepts or raise players' awareness of specific subjects in an interactive and entertaining way.
- Féra is the local name of *Coregonus lavaretus*,
- Féaventure: a video game to immerse the player in the life cycle of whitefish, from reproduction to adult stage.
- But the life of fish is not a smooth sailing journey: fish must find a breeding area, feed themselves, and various factors and processes will affect it (fishing, competition, predation, fishing pressure) (Bourinet et al., 2023)



- Target audience : pre-teens
- Why: pre-teens are aware of environmental changes, but not necessarily of all the impacts on aquatic ecosystems.
- It is a starting point for more advanced explanations on environmental drivers and fish population dynamics, especially during laboratory open days or at schools.

Material and methods

- Developed by students with Unreal Engine 5.1 © Epic Games.
- An intuitive graphical editor for 3D creation of virtual worlds, characters, and animations.
- Blueprint scripting language without coding, while also offering C++ programming for more in-depth control.
- The scenario : based of whitefish cycle from literature (Bourinet et al., 2023; Eckmann, 2013) as survival rates, main predators, etc.
- To play: Windows OS with a suitable graphics card.



Conclusion

- ▶ Game promotion video (in French) →
- ▶ Next step : tests with kids
 - researchers' Night – Friday 29th Sept. 2023
 - open lab day 08th Oct. 2023)
- ▶ Try it out and provide us with feedback : it will be greatly appreciated!

- ▶ Download it →

- ▶ Future: new version with students or a search for funding to have a truly accomplished version.



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Acknowledgments:

- Pascale Balland and USMB Culture Scientifique et Techniques for fundings
- AQUA department @INRAE for fundings

REF:

BOURINET F., ANNEVILLE O., DROUINEAU H., GOULON C., GUILLARD J., RICHARD A., 2023. Synchrony in whitefish stock dynamics: disentangling the effects of local drivers and climate. *Journal of Limnology*, DOI: [10.4081/jlimnol.2023.2134](https://doi.org/10.4081/jlimnol.2023.2134)
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