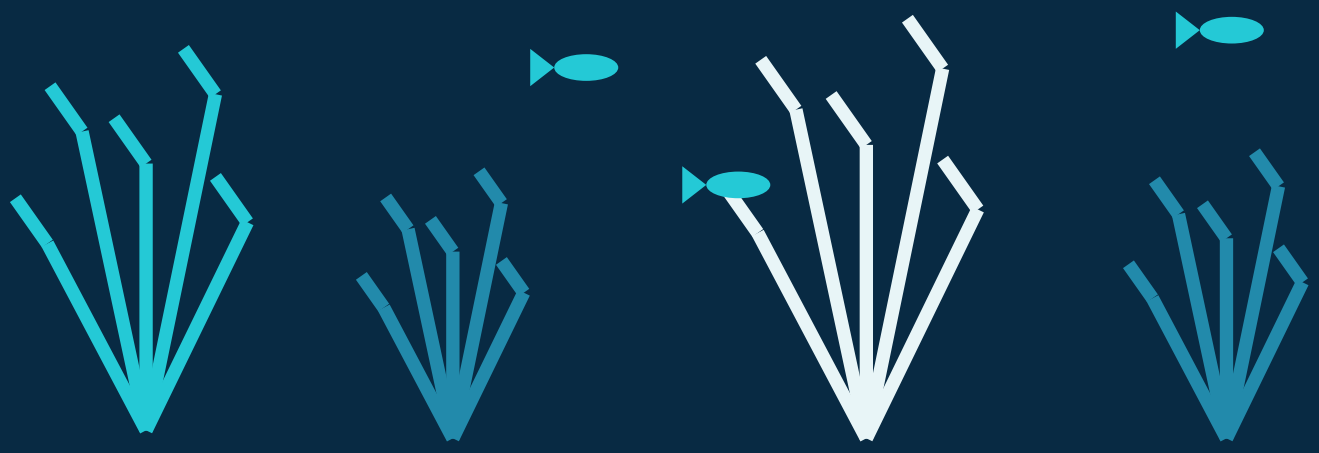
EU4BLUE / COOPERATIVE ESCAPE GAME

THE SILENT REEF

HOST GUIDE

The signal is urgent.
The evidence is incomplete.
Your decisions matter.



Read the reef. Challenge the claim.
Unlock a response that the evidence supports.

AGES 15+ / 3–5 PLAYERS / 60 MIN / B1-B2

A4 / PRINT AT 100% / SINGLE-SIDED

Co-funded by
the European Union

Prepare the expedition

HOST ONLY / SETUP AND SESSION PLAN

Players: ages 15+, teams of 3–5. **Time:** 60 minutes: 5 briefing, 45 play, 10 discussion.
Learning: interpret a spatial record; explain bleaching; distinguish observation from inference; justify a constrained response.
Print: one P01–P07 set per team, plus this guide for the host. Print A4 at 100%, single-sided. Provide five envelopes, pens and optional scissors, dictionary and calculator.

PACK FIVE FILES

Envelope 1: P03. Envelope 2: P04. Envelope 3: P05. Envelope 4: P06. Envelope 5: P07. Give P01 and P02 at the start. Keep all H pages away from players until the final reveal. The Master contains this guide plus every player page.

Before play

Cut the cards on P04, P05 and P06 along the dashed outlines, or let teams cut them. Keep each page's cards with its own envelope and instruction strip. Cards have IDs; colour never carries essential information.

During play

Release files in order after checking both code and explanation. H03 offers two graduated hints per file. No physical lock is needed; accept the final code verbally or in writing. Give H05 as the ending.

Successful completion

Teams justify the five selections and state one uncertainty. The title does not imply that this game contains audio evidence. No fieldwork, water handling or real conservation clearance is involved.

Co-funded by the European Union

Envelope labels

HOST ONLY / CUT AND ATTACH TO FIVE ENVELOPES

FILE 01

STATION MAP

OPEN ONLY WHEN RELEASED BY YOUR HOST

FILE 02

BLEACHING SEQUENCE

OPEN ONLY WHEN RELEASED BY YOUR HOST

FILE 03

EVIDENCE CHECK

OPEN ONLY WHEN RELEASED BY YOUR HOST

FILE 04

RESPONSE BUDGET

OPEN ONLY WHEN RELEASED BY YOUR HOST

FILE 05

AUTHORISATION GRID

OPEN ONLY WHEN RELEASED BY YOUR HOST

Hints from the research desk

HOST ONLY / OFFER HINT 1 BEFORE HINT 2

FILE 01 / HINT 1

Use both direction and habitat symbol.

FILE 01 / HINT 2

Find B in the north, G in the east and B in the south.

FILE 02 / HINT 1

Choose the cause, the tissue change and the immediate result.

FILE 02 / HINT 2

Recovery is a later possibility. White does not automatically mean dead.

FILE 03 / HINT 1

Ask whether the observation proves the whole claim.

FILE 03 / HINT 2

A: visibility changed. B: two events coincide. C: living tissue is present.

FILE 04 / HINT 1

Apply every requirement before comparing costs.

FILE 04 / HINT 2

The cheap HEAT and RUNOFF options omit a required task. Compare the two ANCHORS prices.

FILE 05 / HINT 1

Recover station IDs and the HEAT action ID.

FILE 05 / HINT 2

Use three rows in field-note order and one column. Do not use action cost.

Co-funded by the European Union

Codes and reasoning

HOST ONLY / COMPLETE SOLUTIONS

01 / 684 / KEEP 8

North + B = station 6; east + G = station 8; south + B = station 4. Retain the three separate station IDs.

02 / 291 / KEEP 9

2: warm-water stress. 9: loss of symbiotic algae. 1: paling without automatic death. Card 4 is possible later recovery; 7 and 6 are false. This is a simplified heat-related mechanism, not every possible bleaching cause.

03 / 735 / KEEP 3

A = 7: poorer visibility can affect detection; the count is not a mortality measure. B = 3: heat is plausible but not proven to be the sole cause. C = 5: living tissue confirms life at observation, not future recovery.

04 / 426 / KEEP 2

HEAT 4 costs 3; RUNOFF 2 costs 4; ANCHORS 6 costs 2. Total = 9. Cards 8 and 9 fail the required tasks. Card 1 meets the anchoring requirement but brings the total to 11. The unique valid portfolio is 4, 2, 6. Retain HEAT ID 4.

05 / 859 / KEEP 5

Rows 6, 8, 4; column 4. Read intersections: 8, 5, 9. The first-stage station code supplies the row order, while the chosen HEAT action supplies the column.

FINAL / 89325

Read middle digits in order: 8, 9, 3, 2, 5. Ask for one supported finding and one limitation before giving H05. Example: “The pale colonies had living tissue. We cannot infer reef-wide fish mortality from these counts.”

Co-funded by the European Union

Response authorised

FINAL REVEAL / SHARE AFTER THE LAST LOCK

MISSION COMPLETE

You have unlocked a response. The reef still needs time.

THE RESEARCH ORDER

Survey stations 6, 8 and 4.
Monitor temperature and repeat coral observations.
Control sediment at the work site before rain.
Use existing approved moorings and brief boat crews.
Total response budget: 9 credits.

Your team resisted a dramatic but unsupported conclusion. Pale coral can still be alive. Fewer fish sightings do not automatically mean fewer living fish. A plausible cause still needs investigation.

Monitoring does not remove heat stress. Local action can reduce some pressures, but it does not replace climate action or guarantee recovery. [1, 2] This is a fictional first-response plan, not a professional management prescription.

Your final radio message
Share two sentences with the host: one finding supported by the records, and one uncertainty to investigate next. Different accurate messages are welcome.

Co-funded by the European Union

From game to ocean literacy

HOST NOTES / DIFFERENTIATION / SOURCES

Language edition: B1-B2
Pre-teach reef, tissue, algae, runoff, sediment and mooring. Offer “The record shows … but it does not prove …”. Read instructions aloud when helpful.

The core evidence and codes are shared across editions; instruction and inference language differ. Offer enlarged print, seated roles, a glossary and written explanations. Do not grade speed or accent.

DISCUSS / 10 MINUTES

Which clue changed your initial assumption? What would make the fish surveys more comparable? Why can local reef protection help without solving ocean warming? Who should participate in a real reef-management decision?

Coral reefs support diverse organisms and coastal livelihoods. Heat, pollution and unsustainable fishing can threaten them. [2] The game highlights evidence quality and connected pressures, but its nine-credit budget is not a real estimate of conservation costs.

Sources and reuse
Original fictional game, map, cards and vector artwork. All sites, observations, prices and response rules are invented for teaching. Free educational use and adaptation; not for resale. Supplied logo rights remain unchanged. No external photographs or copied source illustrations are used.

[1] NOAA. What is coral bleaching?
https://oceanservice.noaa.gov/facts/coral_bleach.html

[2] NOAA. Coral reefs: Essential and threatened.
https://www.noaa.gov/explainers/coral-reefs-essential-and-threatened

Last visited: 14 October 2026.