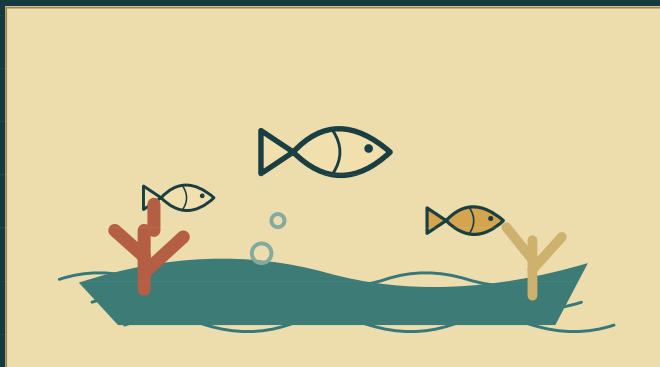


STUDY GUIDE

**TWELVE SEASONS. ONE BUDGET. A
SHARED FUTURE.**



Ecology · economics · governance

For players

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YOUR ROLE AT THE COUNCIL TABLE

You are the steward of a small island shared by Tidehaven's fishing families, Grovehold's foresters and makers, and Sunfield's growers and carers. You do not control a blank spreadsheet. You listen to people, spend public money, negotiate rules, choose harvest levels, and live with delayed consequences.

A SEASON IN FOUR MOVES

1. Hear an island concern and choose a response.
2. Optionally fund one project and hold one council vote.
3. Set fishing and timber effort.
4. End the season, inspect the report, and adapt.

YOUR FOUR PROMISES

- Reef, forest and water each at least 45.
- Every village's wellbeing at least 50.
- Shared trust at least 60.
- At least 8 food in reserve.

These are scenario goals, not universal measures of a good society.

READ CONNECTIONS, NOT ISOLATED NUMBERS

STOCKS

Reef, forest, water, food and trust accumulate or decline. A stock records what remains after past flows.

FLOWS

Regeneration, harvest, household demand, restoration and operating costs change those stocks each season.

FEEDBACK

Low trust can increase unreported catch. Unequal wellbeing can reduce trust. Better water supports crops and reef recovery.

When a number changes, ask three questions: what directly caused the change, what delayed effect is still moving through the system, and who experiences the change first? The season report and model notebook reveal the simplified rules so you can challenge them as well as use them.

A FIXED ANNUAL BUDGET CREATES REAL TENSION

The council receives 72 coins on Balanced difficulty, 84 on Gentle and 60 on Challenging. Basic services and active commitments are reserved before new spending. A fresh allocation arrives each spring and unused money expires. Household earnings support wellbeing but never refill the public account.

OPPORTUNITY COST

Funding a good project still means giving up another possible use of the same coins. Before spending, name the strongest alternative you are leaving unfunded. After the season, ask whether the cost arrived where you expected.

Decision lens	Question
Urgency	What becomes harder or more expensive if delayed?
Distribution	Who benefits, who pays, and who has little voice?
Durability	Is this a one-season response or an investment that changes future flows?
Flexibility	How much budget remains for events you cannot predict?



SEASON 1 · A QUESTION FROM TIDEHAVEN

THE EMPTY NETS

“The boats are coming home lighter. We need to know what is happening before we ask anyone to give up their catch.”

Learning focus: Shared information, Monitoring, Collective action.

Before you play

What information would a council need before limiting a livelihood?

After you play

Which evidence changed your plan, and which uncertainty remained?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions

SEASON 2 · AN OPPORTUNITY, WITH A COST

A BUYER FROM THE MAINLAND



“A merchant will pay well for a shipment of old timber. We could repair half the village. But those trees are our shelter.”

Learning focus: Externalities, Resource capital, Alternative livelihoods.

Before you play

When does a profitable exchange become costly for people who did not choose it?

After you play

Who received the benefit and who carried the environmental cost?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions

SEASON 3 · THE ISLAND IS CHANGING

THE LONG DRY SPELL



“The stream is thin and the soil is cracking. We can protect the spring, but the water carriers will need support.”

Learning focus: Scarcity, Allocation, Upstream and downstream users.

Before you play

Who should carry the cost when water is scarce?

After you play

Did your response solve the shortage or redistribute it?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions



STORM ON THE HORIZON

“The weather is turning. We can secure everyone’s boats now, or repair what is left when it passes.”

Learning focus: Public goods, Prevention, Risk pooling.

Before you play

Which harms are cheaper to prevent than repair?

After you play

What did preparation protect that later repair could not?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions



A PLACE AT THE TABLE

“Three families have arrived from the mainland. There is work to share, if there is room in our agreement.”

Learning focus: Membership rules, Inclusion, Institutional adaptation.

Before you play

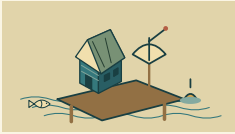
Who belongs in a commons, and who decides?

After you play

How did your rule define membership and responsibility?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions



BOATS BEYOND THE BOUNDARY

“Some crews have been fishing after the agreed hours. Punishment is easy to promise. Fair enforcement is harder.”

Learning focus: Monitoring, Legitimacy, Restorative processes.

Before you play

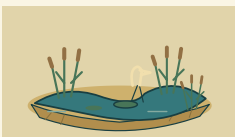
What makes enforcement feel legitimate?

After you play

Would the same penalty work if trust were lower?
Why?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions



THE SPRING RUNS BROWN

“Rain has washed soil from the cleared hills into our fields. Who should pay to put the banks back together?”

Learning focus: Externalities, Responsibility, Ecosystem restoration.

Before you play

Who is responsible for damage that travels downstream?

After you play

Did your response address the source, the symptom, or both?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions



A WINTER FESTIVAL

“We have spent so much time negotiating what to give up. Let us remember what we are building together.”

Learning focus: Reciprocity, Social capital, Reserves.

Before you play

Can trust be treated as a resource?

After you play

How did social connection affect later cooperation?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions



THE PRICE OF PATIENCE

“Some people want to cash in our progress with a larger harvest. Others want to give the reef another season.”

Learning focus: Intertemporal choice, Compensation, Ecological capital.

Before you play

How should immediate income be weighed against a future stock?

After you play

Which future cost was easiest to ignore?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions

TOOLS THAT LAST



“The workshop can repair the old tools instead of importing new ones. We need a little help getting started.”

Learning focus: Circular economy, Efficiency, Opportunity cost.

Before you play

When can efficiency reduce pressure on nature?

After you play

What hidden cost remained after the efficient choice?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions

AN UNCERTAIN FORECAST



“The next storm may miss us. We could use the money elsewhere, but we should decide with our eyes open.”

Learning focus: Uncertainty, Resilience, Precaution.

Before you play

How much should a community spend on an uncertain danger?

After you play

What evidence would make you spend more or less next time?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions

THE NEXT GENERATION



“Soon this council will hand the island on. What do we want our children to inherit: a full account, a living island, or an agreement they can trust?”

Learning focus: Intergenerational equity, Stewardship, Institutional memory.

Before you play

What should one generation preserve for the next?

After you play

Which form of wealth did your legacy preserve:
natural, social, financial, or institutional?

Evidence to watch: Which indicators move immediately? Which change only after the harvest? Which community experiences the result most strongly?

Notes and predictions

PROJECTS AND AGREEMENTS

INVESTMENTS

Project	Cost	What it changes	Idea to discuss
Marine observatory	22	+2 fish recovery / season · less unreported catch	Monitoring makes shared rules easier to enforce. Information is itself a public investment.
Living wetlands	30	+5 water / season · +3 immediate trust	An upstream restoration project creates benefits far beyond the households that fund it.
Community pantry	24	+12 food now · +2 food saved / season	Shared reserves reduce exposure to shocks, but building them has an opportunity cost.
Regeneration grove	26	+3 forest recovery / season · +5 forest now	Restoration works over time. Harvesting must leave room for regeneration.
Cooperative harbour	32	+2 Tidehaven wellbeing / season · +4 now	Shared infrastructure can improve livelihoods without increasing resource extraction.
Wind workshop	38	+2 Grovehold wellbeing / season · supports lighter logging	Alternative livelihoods can make conservation agreements politically sustainable.
Island care house	28	+1 wellbeing to every community / season · costs 1 coin / season	A public service has a continuing operating cost as well as an initial construction cost.
Council school	34	+2 trust / season · +8 support for future proposals	Transparent institutions and shared knowledge help people evaluate collective decisions.

AGREEMENTS

Agreement	Effect	Governance question
Protect the breeding grounds	Catch −15% · fish recovery +4 / season	A common-pool resource can be governed through agreed boundaries and rules.
Forest stewardship charter	Timber income −20% · forest recovery +3 / season	Harvest rules change both resource use and the distribution of immediate income.
Share an island dividend	Costs 4 coins / season · +2 wellbeing to all communities	Compensation can support cooperation when conservation creates uneven burdens.
A community watch	Costs 2 coins / season · greatly reduces unreported catch	Agreements need credible monitoring. Enforcement consumes real resources.
Shared maintenance duty	Operating costs −2 coins / season · −1 wellbeing to all communities	A lower public cost can shift a hidden time burden onto households.
An open council	+2 trust / season · +5 support for future proposals	Procedural fairness can make institutions more legitimate even when people disagree.

READ THE LEGACY, THEN REPLAY

The legacy screen is evidence for a conversation, not a verdict on the player. Explain how at least three decisions interacted to create the final island. Then identify one assumption in the model that you would change before using it to discuss a real community.

REFLECTION PROMPTS

1. Which cost arrived later than its benefit?
2. Which group carried a burden for a shared benefit?
3. What did the budget make impossible?
4. When did trust change what was politically possible?
5. What would you keep in a second campaign, and what would you reverse?

GLOSSARY

Commons: a resource shared by users whose actions affect one another.

Externality: a cost or benefit experienced outside a transaction.

Opportunity cost: the best alternative forgone.

Resilience: capacity to absorb disruption and continue functioning.

Stewardship: care for a resource across time.

Legitimacy: acceptance that a rule-making process is rightful.

Distribution: how benefits and burdens are spread.