

**Climate change and demand for eco-friendly seafood are changing Arctic fishing.**

Seafood eco-labels can raise prices, but getting certified costs money. Meanwhile, Arctic fishing fleets get fuel subsidies to help with costs, but this adds to pollution.

- 1 You invest in eco-labels to sell to climate-conscious customers.
- 2 You keep fuel subsidies so Arctic fisheries stay competitive.
- 3 You gradually end fuel subsidies and help switch to cleaner fishing technologies.

Answer : see page 6

**Warming waters, pollution, escaped farm salmon, and dams are making it harder for wild salmon to survive in the Arctic.**

This hurts rivers and their ecosystems, facilitates the spread of parasites, and threatens both nature and the fishing industry.

- 1 You protect wild salmon habitats and make fishing rules stricter.
- 2 You increase fishing quotas while there are still enough wild salmon.
- 3 You invest in salmon hatcheries and in restoring rivers to help salmon populations grow.

Answer : see page 7

**As oceans warm, some fish move north to cooler waters.**

This opens up new fishing spots but also brings conflicts over who can fish what and in what quantity, and puts pressure on native Arctic species and ecosystems.

- 1 You adapt fishing rules and quotas to catch new fish species.
- 2 You focus on protecting native Arctic species.
- 3 You try to work with other countries to prevent overfishing and conflicts.

Answer : see page 8

**Ships operating in Arctic ice can carry invasive species through their hulls and ballast water.**

These invaders spread disease to native species, harming local ecosystems. Still, Arctic shipping brings money and jobs to the region.

- 1 You set strict biofouling and ballast water regulations in Arctic waters.
- 2 You let ships continue without extra rules on invasive species.
- 3 You make ships clean their hulls before they enter Arctic waters.

Answer : see page 9

**Warmer temperatures, changing sea currents, and rising salt levels are making life harder for farmed fish.**

Norway's salmon farms are already seeing more diseases, parasites and slower growth.

- 1 You invest in aquaculture systems that can handle warmer water.
- 2 You slow down aquaculture expansion to protect the environment.
- 3 You fund research to monitor climate effects and adjust aquaculture practices.

Answer : see page 10

**The lionfish is an invasive species which migrated to the Mediterranean from the Red Sea.**

In the absence of predators, it exploits the food resources. This makes it harder for native species to survive.

- 1 You launch a campaign to encourage people to eat lionfish.
- 2 You create citizen science and diver programs to track and remove lionfish in key areas.
- 3 You fund research to see if new predators could help control them.

Answer : see page 11

**The blue crab is an invasive species introduced to the Mediterranean from the US East Coast in ships' ballast water.**

With no predators and fast reproduction, they are spreading fast, damaging native species, their habitat, clam farms, and fishing gear.

- 1 You promote blue crab fishing and market it as a local seafood delicacy.
- 2 You invest in large-scale removal efforts and tracking programs.
- 3 You do nothing and hope nature finds its own balance.

Answer : see page 12

**Studies show that 12,9% of seafood on the Greek market is mislabelled.**

This can be dangerous for people with allergies, hurts trust in local fishers, and may lead people to stop eating seafood.

- 1 You require DNA testing and digital tracking for all seafood products.
- 2 You launch a national campaign to help people identify seasonal, local fish.
- 3 You create a trusted "Mediterranean Verified" label for traceable seafood.

Answer : see page 13

**More than 93% of assessed fish stocks in the Mediterranean are overfished.**

This hurts local fishers, increases seafood imports from all over the world, and threatens the region's culinary traditions based on local seafood.

- 1 You enforce strict fishing quotas and seasonal bans.
- 2 You promote sustainable aquaculture of native species.
- 3 You launch a seafood heritage program to support creativity and sustainability in the culinary sector.

Answer : see page 14

**The Mediterranean is warming 20% faster than the global average.**

This harms cold-water species like bluefin tuna, accelerates the spread of invasive species, and speeds up ocean acidification, which threatens coral, mussels, and plankton.

- 1 You create marine refuges and no-fishing zones.
- 2 You support research and adaptation for affected fisheries and aquaculture.
- 3 You launch a Mediterranean climate action pact for the sea.

Answer : see page 15

**The Baltic Sea is getting more polluted because of runoff from agriculture, cities, and even wastewater treatment, which is worsening toxicity.**

This can cause toxic metals like thallium to build up, harming sea life and putting people's health at risk.

- 1 You enforce strict rules to limit runoff from agriculture and cities.
- 2 You upgrade wastewater treatment plants to reduce discharge.
- 3 You start an awareness campaign with rewards to get everyone to reduce pollution voluntarily.

Answer : see page 16

**The Baltic Sea is noisier due to maritime traffic.**

Loud underwater sounds confuse herring by stressing them out, using up more energy and making it harder for them to reproduce. This threatens the herring fishery, a key economic and cultural resource.

- 1 You add seasonal or area-based fishing limits in noisy zones.
- 2 You encourage quieter engines and equipment for fishing and shipping.
- 3 You encourage people to consume more diverse seafood, so they rely less on herring.

Answer : see page 17

**Fertiliser runoff from agriculture causes eutrophication leading to huge algae blooms in the Baltic Sea.**

This lowers oxygen, creating dead zones, killing marine life and harming fishers and aquaculture businesses.

- 1 You invest in removing algae and increasing oxygen to prevent dead zones.
- 2 You promote sustainable agriculture on land to limit fertiliser runoff.
- 3 You support the restoration of coastal wetlands as filters between the land and sea.

Answer : see page 18

**Many parts of the Baltic Sea are damaged by human activities.**

Fish like cod are losing the safe places they need to live and grow. This means fewer fish, more threats to biodiversity, and to the livelihood of those who rely on the sea.

- 1 You implement stricter fishing rules so fish populations can grow back.
- 2 You launch large-scale habitat restoration projects in key areas.
- 3 You promote selective fishing gear that is safer for nature, but still allow fishing.

Answer : see page 19

**Many fish species in the Baltic Sea are caught without scientific advice or proper monitoring.**

Many catches aren't reported, which makes it hard to evaluate the state of fish stocks. This is a threat to biodiversity and the future of fishing.

- 1 You increase enforcement and penalties for unreported fishing.
- 2 You work with fishers to collect better data and offer rewards for reporting catches.
- 3 You use technology like cameras and digital logbooks to track what's caught on boats.

Answer : see page 20

**The Black Sea faces a bloom of jellyfish brought in ships ballast water.**

Their gelatinous masses are so thick that they clog fishing nets and destroy fishing gear. The jellyfish feeds on fish eggs and larvae, affecting the reproduction of native species. Tourists also get stung when swimming.

- 1 You encourage fisheries to use hooks instead of nets in affected regions.
- 2 You develop economic uses for jellyfish, such as food products, pharmaceuticals, or fertilisers.
- 3 You implement stricter control of ballast water from ships to prevent further introduction of invasive jellyfish.

Answer : see page 21





2

**Illegal, unreported and unregulated fishing is a major threat to sustainable fisheries and marine biodiversity in the Black Sea.**

By braving fishing quotas, these practices push local species toward extinction and harm the livelihood of fishers.

- 1 You increase enforcement and penalties for illegal fishing.
- 2 You support legal fishing activities with incentives.
- 3 You collaborate with neighbouring countries to improve control.

Answer : see page 22

3

**Climate change is warming the Black Sea.**

Anchovies—a favourite fish in local dishes—are moving to cooler waters where they are harder to access. As a result, fishers catch fewer anchovies than they used to.

- 1 You implement stricter fishing quotas to protect anchovy stocks.
- 2 You promote alternative species to reduce reliance on anchovy.
- 3 You invest in **aquaculture** as a complement to fishing.

Answer : see page 23

4

**The invasive *Rapana venosa*, a predatory sea snail, is thriving in the Black Sea, depleting mussel and oyster populations and harming biodiversity.**

Fishers now debate whether to make a new business out of this snail or control its spread.

- 1 You encourage fishers to catch this snail, using selective gear that does not harm other animals or the seafloor.
- 2 You choose not to act, trusting that nature always finds its way.
- 3 You encourage creating new products using the sea snail.

Answer : see page 24

5

**You receive new data warning you that stocks of Black Sea turbot are decreasing due to habitat destruction and overfishing, including illegal fishing.**

Turbot is one of the region’s most valuable fish, important for both nature and people.

- 1 You enforce stricter fishing quotas and monitoring.
- 2 You promote the fishing and consumption of alternative species with healthier stocks.
- 3 You invest in farming turbot to reduce pressure on wild populations.

Answer : see page 25

1

**You receive new data warning that wild cod stocks are decreasing in the Atlantic.**

Cod is one of the most popular species among consumers in Europe. It also plays an essential role in the marine ecosystem, both as a predator and as prey.

- 1 You close the fishery of this species by implementing a **moratorium**.
- 2 You lower the cod fishing quotas.
- 3 You provide subsidies for fishers to adopt gear that reduces cod **bycatch**.

Answer : see page 26

2

**Due to climate change, the ocean is becoming more acidic.**

As a result, there is less **carbonate** available in the water. Oyster farmers have observed that this causes young oysters to develop weaker shells, making them more vulnerable.

- 1 You ask farmers to grow kelps to help make the water less acidic.
- 2 You work with scientists to try stronger oyster strains that handle acidic water better.
- 3 You encourage farmers to check the water and add natural products like crushed shells or limestone to fix the pH.

Answer : see page 27

3

**Most brown shrimps fished in the North Sea are processed and peeled in Morocco, far from their fishing zone.**

This increases the **CO<sub>2</sub>** emissions related to transport.

- 1 You keep things the same.
- 2 You help set up machines to peel shrimp close to where they are caught.
- 3 You invest in social cooperatives with workers peeling manually near the fishing zone.

Answer : see page 28

4

**Since the 1960s, oil and gas work in the North Sea has brought business but also problems.**

Along with loud ships and pollution, it makes it harder for sea animals to live and reproduce.

- 1 You drastically cut oil and gas production.
- 2 You look for the same species to catch in other seas.
- 3 You make a deal with nearby countries to limit pollution and noise from oil and gas.

Answer : see page 29

5

**French and British fishers argue over scallop fishing in the Channel.**

British boats fish all year, but French boats must stop part of the year to protect scallops. French fishers accuse the British of unfair competition and of harming scallops.

- 1 You ban scallop fishing together during key breeding times.
- 2 You let each country fish with their own rules, but establish a de-escalation protocol in case of conflicts.
- 3 You make a shared scallop plan with limits and areas that take turns closing.

Answer : see page 30



An oil ship sinks during a big storm and spills oil into the ocean. The oil kills sea animals, harms local fishers, and severely damages the coastal environment.



A large quantity of fertiliser washes into the sea and, with warm water, causes a big algae bloom. People can't collect shellfish, and shellfish farmers lose a lot of their harvest.



The EU and the UK sign an important fishing agreement for the Channel and North Sea. It helps fishers keep their rights and makes it easier to take care of shared fish stocks.



After elections, the new government of Norway decides not to authorise mining of the deep Arctic seabed. This helps protect marine biodiversity and prevents irreversible environmental damage.



Record-low sea ice lets more ships travel through the Arctic. This makes the ocean much louder than usual, which scares and disturbs whales and other sea animals.



Scientists go on an unprecedented expedition to the Arctic Ocean and find new species on the sea floor. Some get protected, so deep-sea mining authorisations are put on hold.



Old ammunitions from World War II are found in a busy fishing area in the Baltic Sea. They are leaking toxic substances, so fishing is stopped to keep people safe.







A gas pipe explodes in the Baltic Sea, releasing methane. Toxic sediments from the seabed get mixed in the water and poison animals, affecting fisheries. Not to mention marine species killed by the explosion.



The EU and Baltic countries give new subsidies to help fishers switch to more responsible fishing. With this help, many fishers can now use safer and more sustainable ways to fish.



A famous Italian food influencer shares a blue crab recipe online. The recipe goes viral, and more people start buying this crab and eating seafood. This helps control the blue crab population and gives small fishers more money.



An underwater landslide shakes up the ocean floor. It ruins habitat for many marine species and blocks their migration routes. A tsunami hits the coast and damages fishing boats.



A scandal shows that some fish sold as "local" was actually imported. People feel tricked and stop buying seafood. Local fishers lose money and trust from the public.



A war starts in the region. Countries stop working together to protect the ocean and illegal fishing activities are blooming. Everyone is affected, from small fishers to restaurant owners.



A big marine heatwave hits the Black Sea, affecting the migration of some sea animals. This causes irreversible damage to some kelp forests and seagrass meadows, which are crucial habitats for many marine species. Heatwaves are also bad for humans.



Bulgaria and Romania sign an agreement to create the largest ever marine protected area in the Black Sea. This gives sea animals a safe place to live and grow. It also helps both countries work better together, but some fishers can't fish there anymore.





