

5.8 Impacts of Overfishing

Name: _____ Class: _____ Date: _____

Total: 9 marks

KEY WORDS overfishing 过度捕捞 • bycatch 兼捕

Objective

Build the skills to answer exam questions on **overfishing**.

You must be able to:

- explain how **overfishing** 过度捕捞 collapses fish stocks
- describe **bycatch** 兼捕 and destructive methods
- suggest management (quotas, protected areas)

1 Worked examples

Study these first. Each one shows the method for a question type used later — follow the steps and you can do the Practice and Exam-style questions yourself.

■ How overfishing works

Fish are a **common resource**; catching them faster than they **reproduce** collapses the stock. Once a population falls too low, it may not recover.

■ Destructive methods

- **Bycatch** — non-target species (dolphins, turtles) caught and killed in nets.
- **Bottom trawling** — dragging nets over the seafloor destroys habitat.

■ Consequences

Collapsed fisheries harm the marine food web and the people who depend on fishing for food and income.

■ Management solutions

- **Catch quotas/limits** on how much can be taken.
- **Marine protected areas** where fishing is banned so stocks recover.
- **Selective gear** to reduce bycatch, and seasonal closures.

2 Practice

Now apply the methods above.

2.1 Why does overfishing collapse a fish stock? [1]

2.2 What is bycatch? [1]

2.3 State one method to manage a fishery sustainably. [1]

3 Exam-style questions

3.1 A marine protected area helps fish stocks by [1]

A	B
C	D

A allowing unlimited fishing

B banning fishing so populations recover

C removing all fish

D adding pollutants

3.2 A commercial fishery catches fish faster than they reproduce.

(a) Predict what happens to the fish population. [1]

(b) Explain two ways this could be prevented. [2]

3.3 Explain why bottom trawling is especially damaging to marine ecosystems. [2]