

Single-Stock Management Versus the Notion of Multi-species:

Fish do not exist in isolation

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The amount of a species in the sea varies from year to year

- Natural conditions differs a lot between years
- If the species is fished too hard, the number of new fish decreases
- A depleted stock is more sensitive to 'poor' years
- If the species is fished very little, the number and growth of new fishes may decrease
- MSY managed stocks are between these extremes



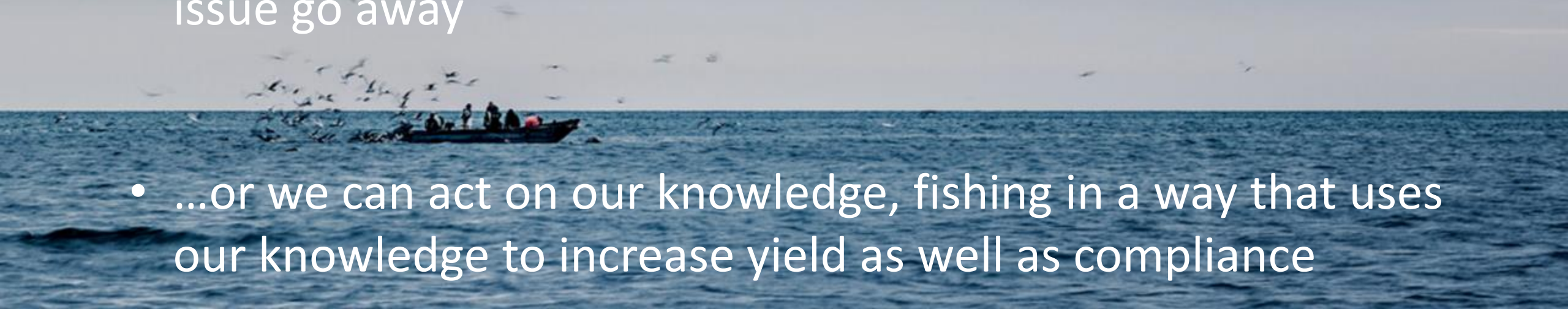
Fish are not caught only with their own species



- Very few fisheries catch just one species
- Optimising catch for one species in isolation generally means losing another
- Most fishers depend on all of the catch, not just one species
- Separate management for the species provides incentives to underreport catches of the limiting species



'All the shelves are never full at the same time'

- Not all species can be at their maximum at the same time
 - Fish compete for food or are eaten by other fish
 - So even if they are caught in isolation, they exist in a food web
 - We can ignore the other species, but that does not make the issue go away
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- A small boat with several people is on the ocean. A large flock of birds, possibly gulls, is flying around the boat, creating a dynamic scene. The sky is overcast and the water is a deep blue.
- ...or we can act on our knowledge, fishing in a way that uses our knowledge to increase yield as well as compliance



Thank you!

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