INVASIVE SPECIES IN TURKEY

FMV IŞIK SCHOOLS

What is ‘Invasive Species’?

- Invasive species is an organism that is not nature to a particular area.

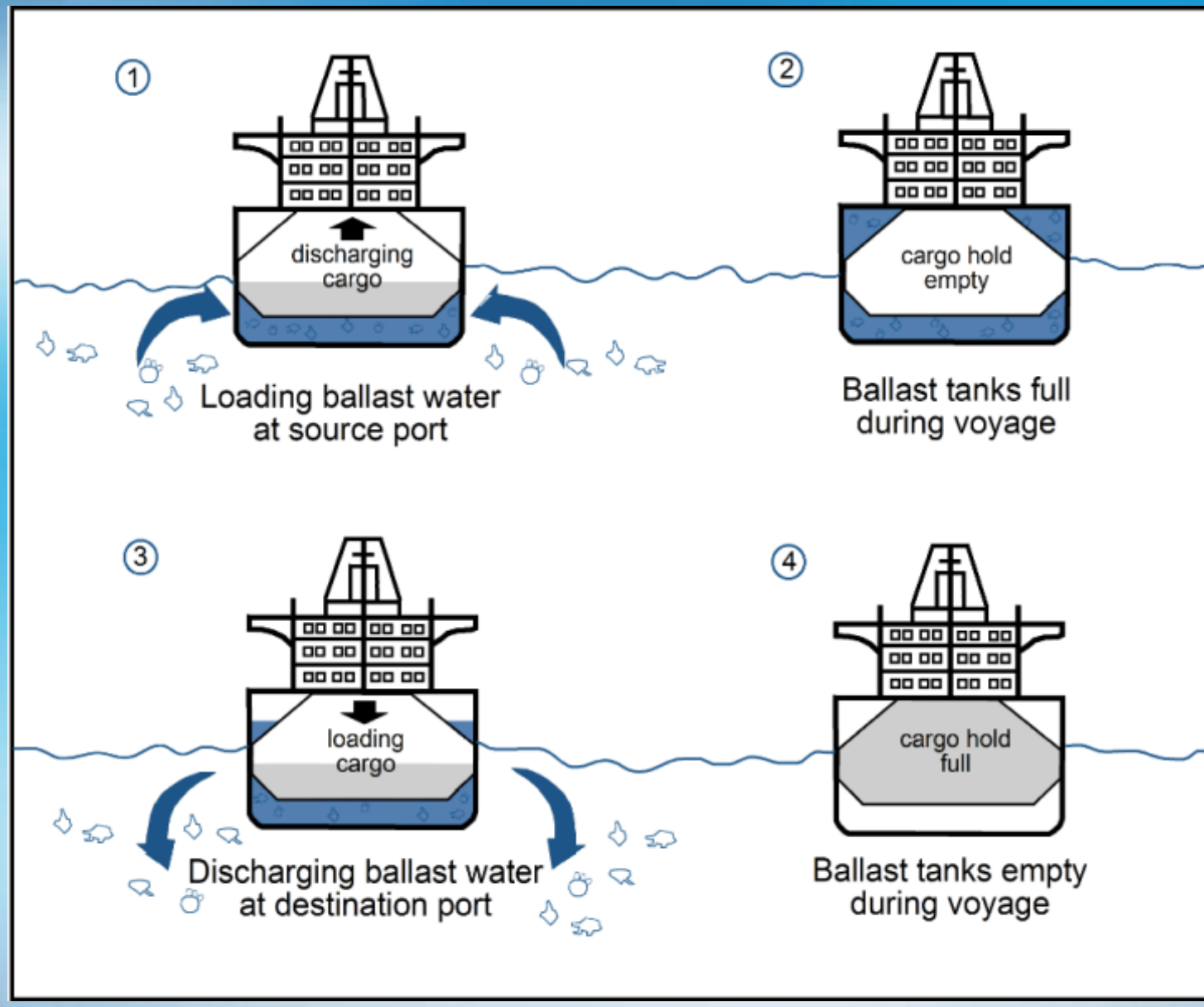
- To be invasive, a species:
  - must adapt to the new area easily,
  - Must reproduce quickly,
  - Must harm property.

HOW DO THEY SPREAD?

- Many species are introduced into a new region accidentally:
  - ❖With Ballast Water,
  - ❖With Human,
  - ❖By the changes of the ecosystem.

The Ballast Water

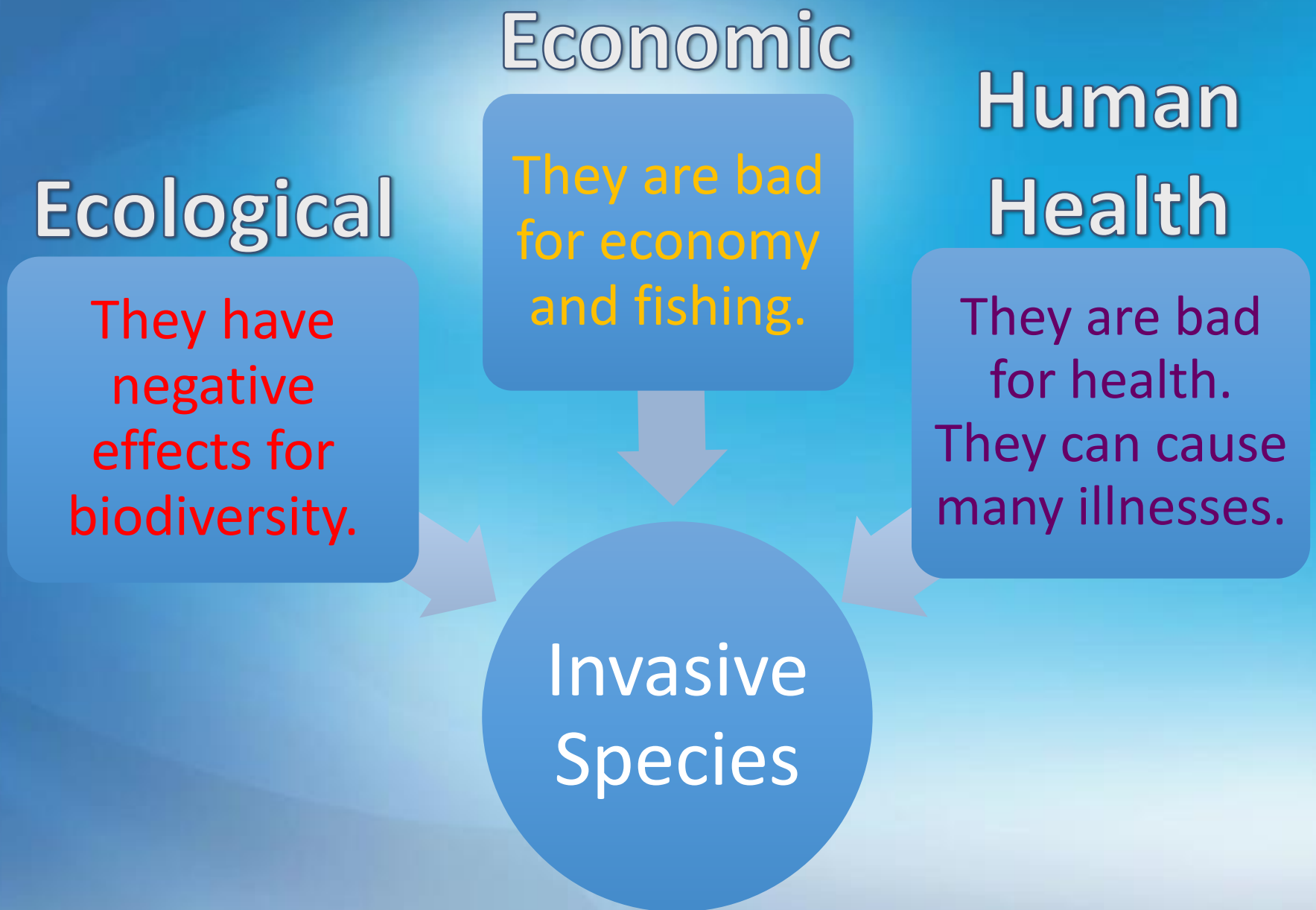
- Ballast water are used more than 120 years to balance ships.
- Invasive species are carried with these waters.
- End of 1980s Canada and Australia are one of the countries which were surrounded by invasive species.
- In Turkey 5 dangerous species threatened Turkish Coasts.
- When the ships pour the ballast water into the seaports, invasive species transport one to another.



(Video Here)

- https://www.youtube.com/watch?v=KYIJdhw8NcA
- https://www.youtube.com/watch?v=w9JgAXgiqLQ
- https://www.youtube.com/watch?v=gN0wq21DYIc

What are the effects of 'Invasive Species'?



The Invasive Species in Turkey

In Turkey, there are:

- 14 groups
- 400 types of species
- 153 new species are found in last 5 years

The most Common species are:

1) Molusca
2) Polychaete
3) Crustacean
4) Fish

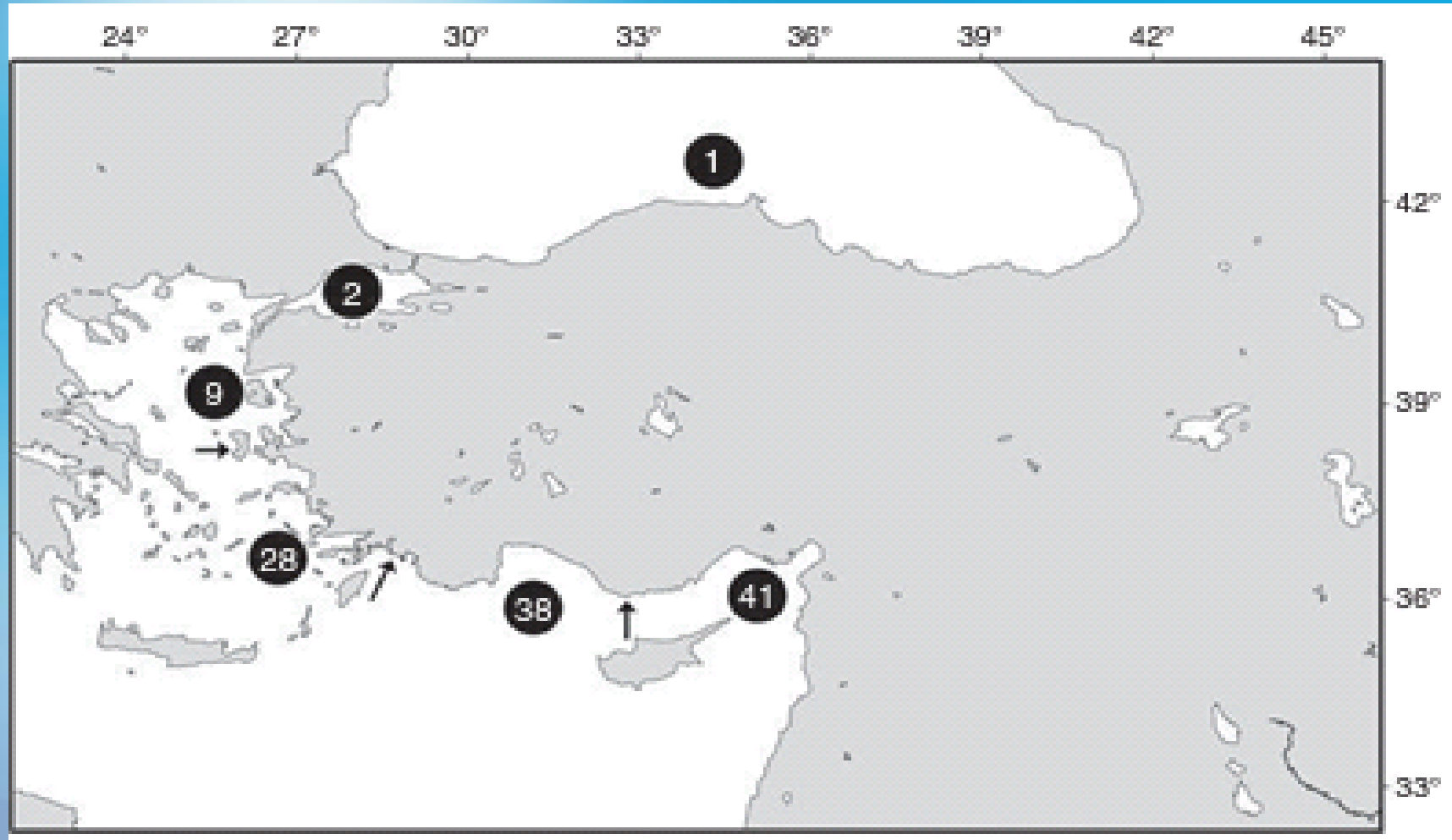
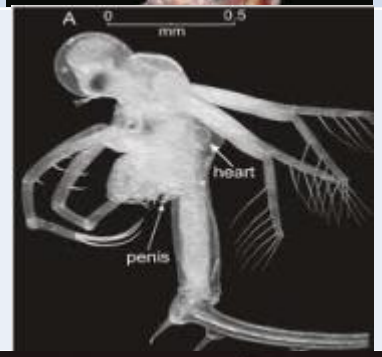


Fig. 2. Number of alien fish species at Turkish coasts.

Name of the Species	Habitat	Negative Effects	Picture
Bugula neritina	Warm water areas	colonises any freely available substratum	
Cercopagis pengoi	Great Lakes	a water flea that has the potential to affect the abundance and condition of zooplanktivorous fish and fish larvae	
Charybdis hellerii	Several locations in the Mediterranean Sea.	A threat to native crab populations	
Codium fragile ssp. tomentosoides	Water areas	Causes a nuisance to humans when it accumulates on beaches and rots producing a foul odor	

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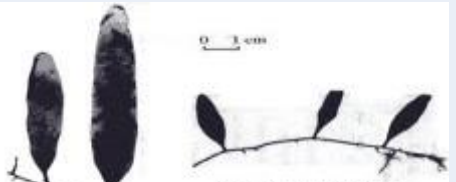
Halophila stipulacea	Mediterranean and Caribben Sea	a treat for biodiversity	
Hypnea musciformis	Europe (Mostly in Italy)	Quickly become invasive and a nuisance	
Mnemiopsis leidyi	Mostly in the Atlantic coast of North and South America	Threatens native amphibians and fish, effects the entire food chain and zooplanktons	
Salmo salar	Black Sea	Harmful for mostly fishing	

Name of the Species	Habitat	Negative Effects	Picture
Salvelinus fontinalis	North America, South America, New Zealand, Asia, and many parts of Europe / Fresh water, salwater or marine	Threatens native amphibians and fish	
Tilapia zillii	Provided 70% of Egypt's fish production. (Good Effect)	Estuarine habitats, lakes, marine habitats, water courses	
Columba livia	Europe	Damages to buildings and monuments because of their corrosive droppings.	
Caulerpa ollivieri	Mediterranean coast of southern France	A harmful seaweed	

Name of the Species	Habitat	Negative Effects	Picture
Cyprinus gibelio	Trakya	easily grow and rise their population, so harmful for other species	
Ctenopharyngodon idella	Asia	Can consume lots of plants (100x their weight)	
Gambusia afffinis	Asia	Eats the mosquitos's larveas.	
Dreissena polymorpha	America, Asia, Europe	Harmful for conomy and ecosystem	

The Measures Required to Protect the Inner Watters Against Invasive Species

- Some countries have been struggling with the invasive freshwater plants, attempting to create control mechanisms, but there is not enough level of such activities in Turkey yet.
- Stopping the spread of unwanted water plants is not a simple case of aquatic ecosystems. So it will be easier to control the advance of plant species in internal waters.

SOURCES

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