


# Antarctica is a fragile environment



What should  
we do with  
Antarctica In  
the future?


What threats  
are there to  
Antarctica and  
what  
opportunities?

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A photograph of two penguins, likely Adelie penguins, standing on a vast, flat expanse of white ice under a clear blue sky. The penguin on the left is slightly smaller and is looking towards the right. The penguin on the right is slightly larger and is looking towards the left. Both have black heads, backs, and wings, with white chests and bellies. Two speech bubbles are overlaid on the image. One speech bubble, located above the larger penguin, contains the text 'What do you think?'. The other speech bubble, located to the left of the smaller penguin, contains the text 'What is the future for Antarctica?'.

What do  
you think?

What is the  
future for  
Antarctica?

Two penguins are standing on a snowy, icy landscape. They are facing each other, and there are four speech bubbles around them, each containing a suggestion for protecting Antarctica. The background is a vast, flat expanse of white snow under a clear blue sky.

What about turning it into a world park?

We could encourage people all over the world to do something about global warming

We could ban fishing and Whaling

We could limit the number of tourists

**Can you think of any other ways to protect Antarctica?**

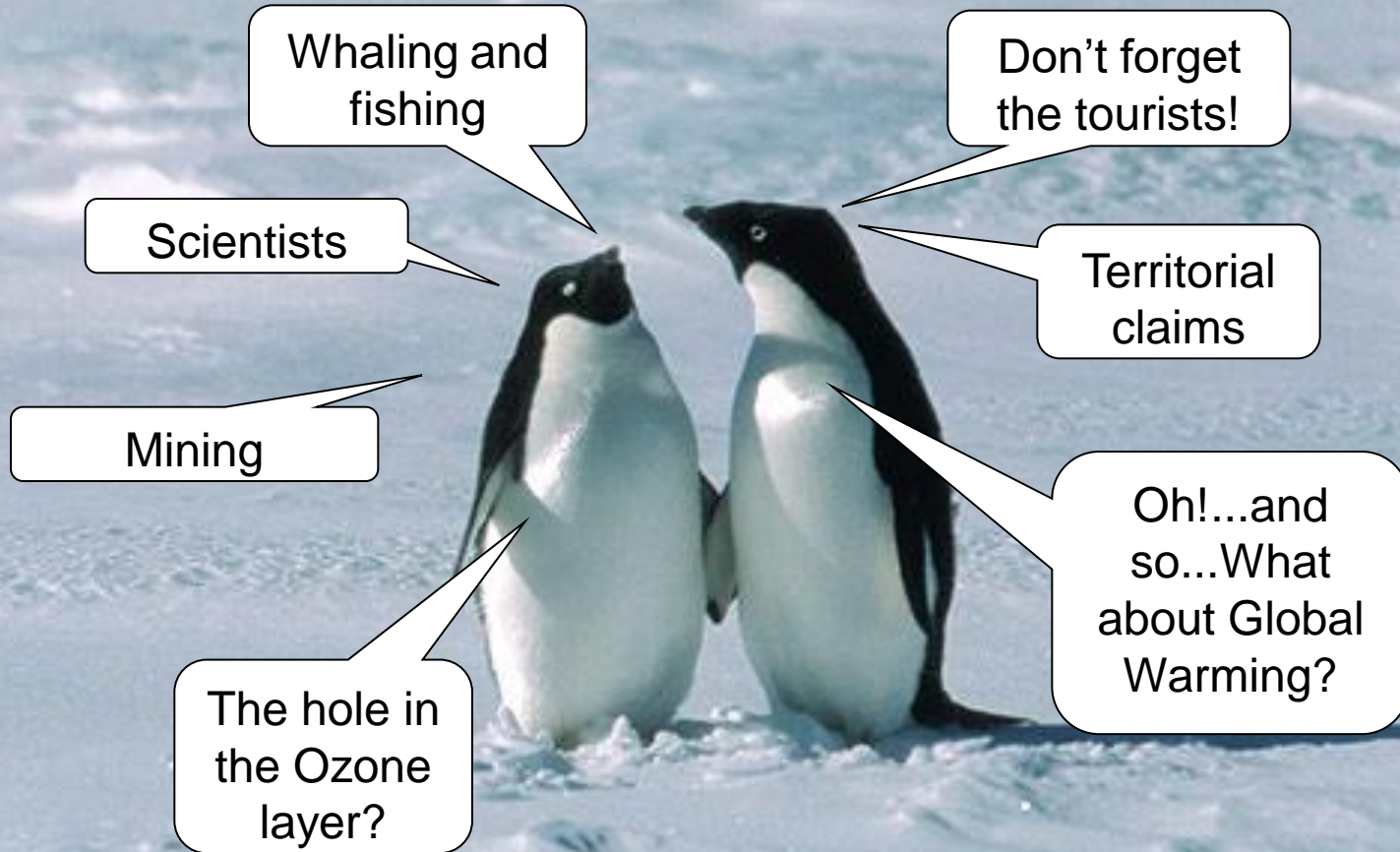


**Have the activities of the  
research bases in  
Antarctica affected the  
environment there?**

**Are glaciers the most  
vulnerable parts of  
Antarctica? Why?**

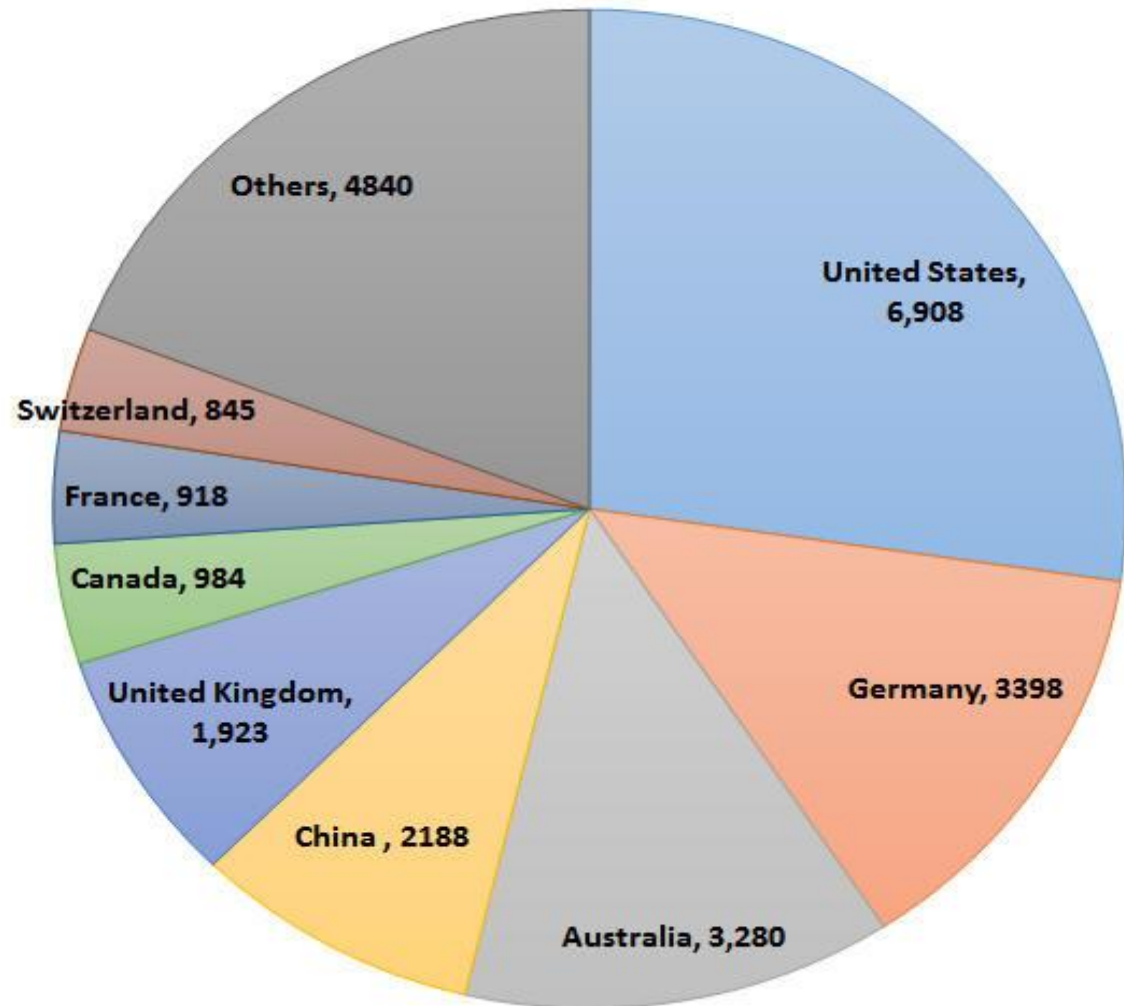


# How is Antarctica used by people?



**Why so many  
countries are  
interested in  
this  
continent?**

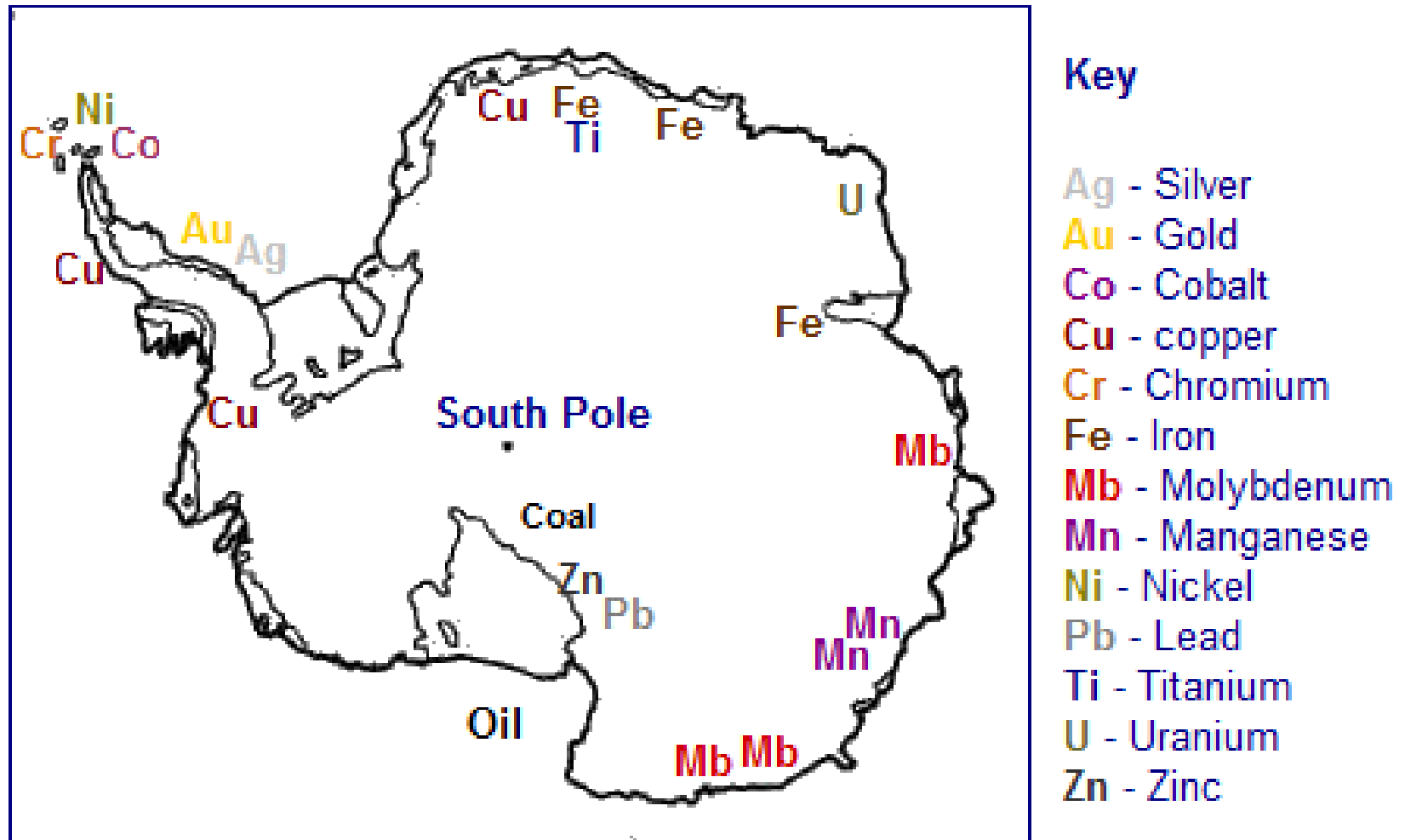
**Tourist Nationalities in  
Antarctica 2012-2013**



# Because Antarctica has got many minerals...

## Mining in Antarctica

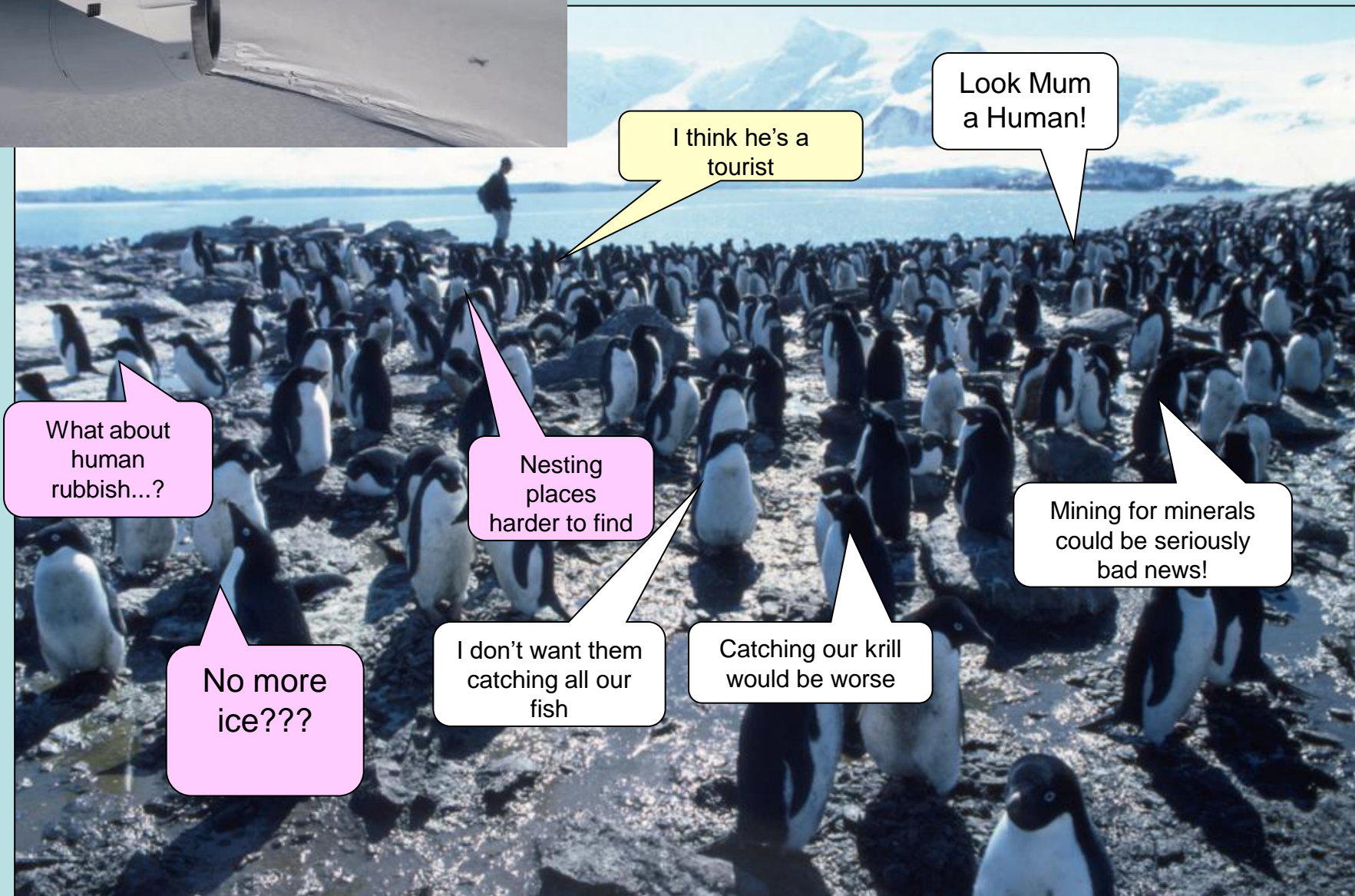
Mineral map of Antarctica showing known significant deposits of various minerals







# Threats to Antarctica...



I think he's a  
tourist

Look Mum  
a Human!

What about  
human  
rubbish...?

Nesting  
places  
harder to find

Mining for minerals  
could be seriously  
bad news!

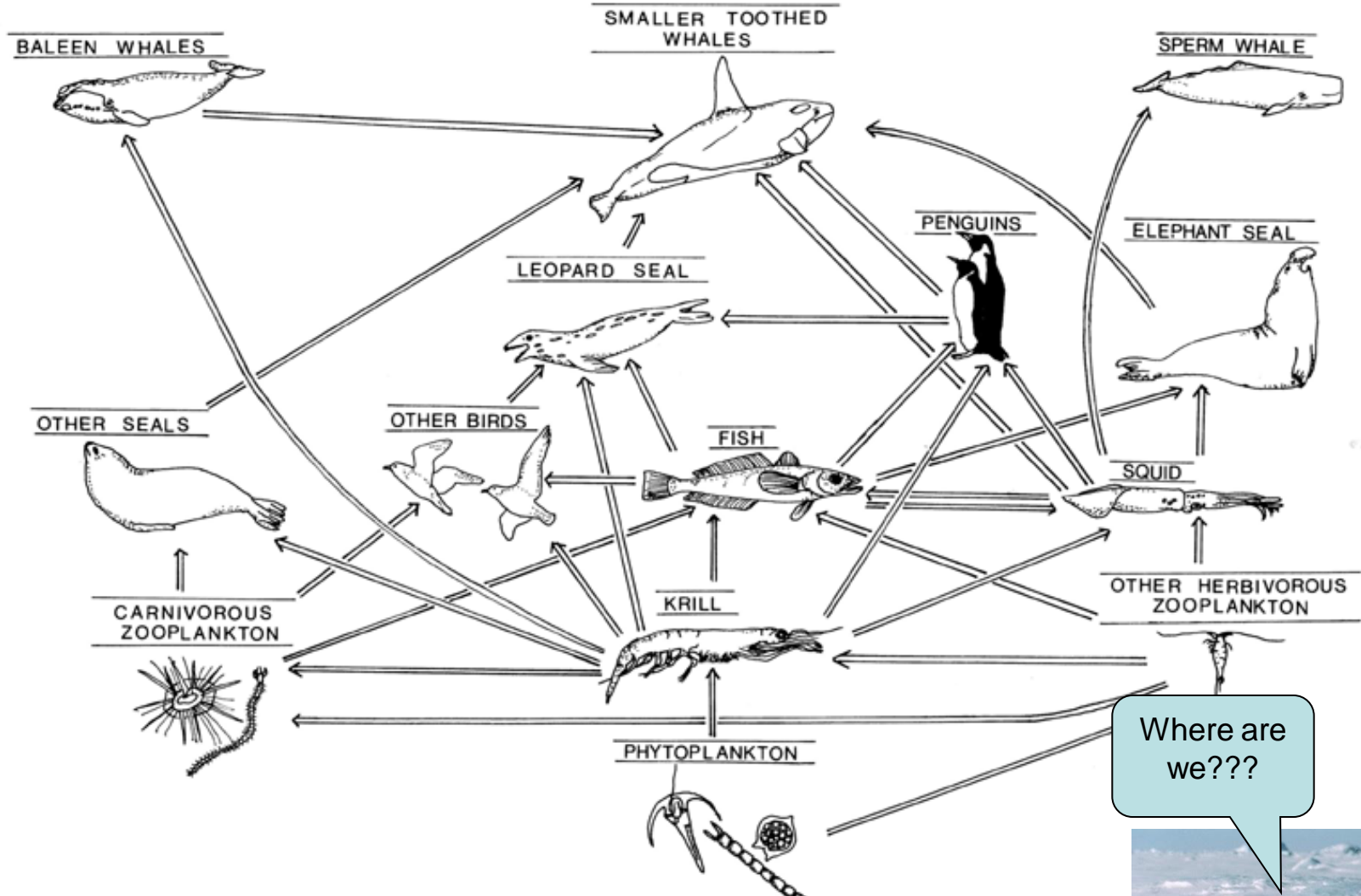
No more  
ice???

I don't want them  
catching all our  
fish

Catching our krill  
would be worse

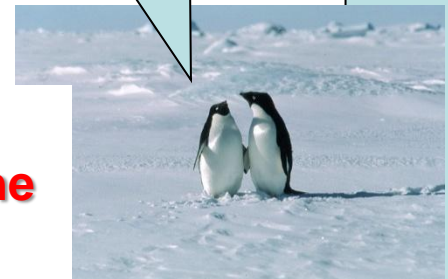


## ANTARCTIC OCEAN FOOD WEB



Describe how the food web is affected by people.....  
Think about global warming and pollution...**Remember! if the krill dies, then the whole food chain is affected**

Where are we???



# **Antarctica has a fragile ecosystem**

**Mainly because a lot of the marine life relies on krill, which is at the bottom of the food chain. If the number of krill was to decline, this could have knock-on-effects on the other creatures that depend on krill for their survival.**

**Plankton absorbs carbon dioxide and the Southern Seas act as a carbon sink. This may help to reduce the greenhouse effect.**

## **RESPECT THE NATURE OF OUR PLANET**



# How can the interests in Antarctica be managed?

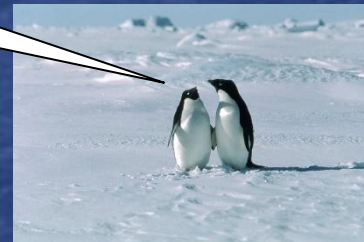
DO YOU AGREE?...

Without an international agreement like the **Antarctic Treaty** there would be a free-for-all in Antarctica – anybody could do or take what they want.

**“It is in the interest of all mankind that Antarctica shall continue to be used forever for peaceful purposes and shall not become the scene or object of international discord”**

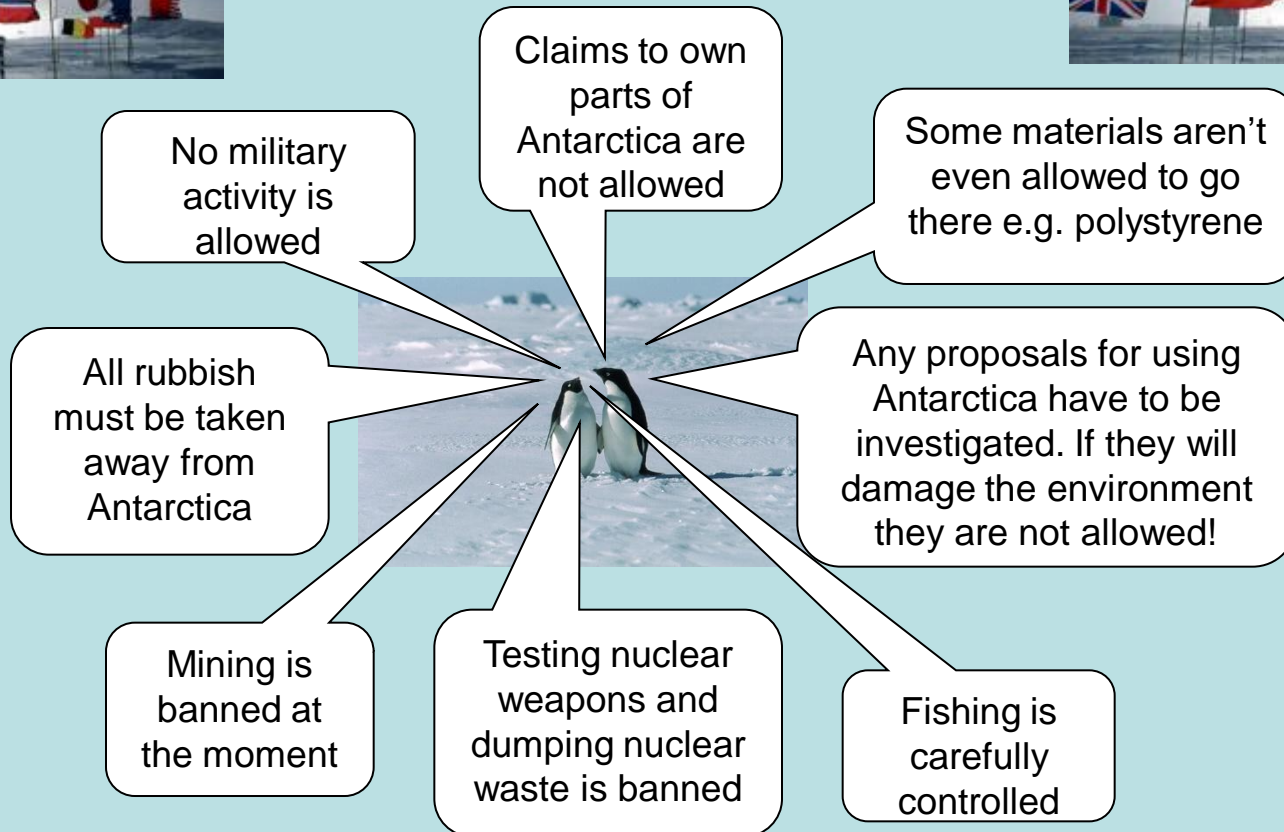
The Antarctic Treaty, 1961

Just to get you thinking!





# The Antarctic Treaty



The Treaty says Antarctica is a good place for scientific research. Countries who conduct research in Antarctica have to share their results with other members of the treaty

# The 1961 Antarctic Treaty Covers 5 Main Areas

- **No military use** shall be made of Antarctica, though military personnel and equipment may be used for peaceful purposes.
- There will be complete **freedom of scientific investigation**.
- Antarctic Treaty Nations will exchange plans for their scientific programs, scientific data will be freely available and scientists will be exchanged between expeditions where practical.
- **No** activities under the Treaty will affect claims to **sovereignty of any part of Antarctica made by any nation**. All territorial claims are put aside for the duration of the Treaty.
- **Nuclear** explosions and nuclear waste disposal **are banned** from Antarctica.

