Special Stopover I: Strawberries At Any Costs?

Spain is the world's biggest strawberry exporter. 90% of its strawberry production is concentrated in the area between the provinces of Huelva and Seville, where the national UNESCO Park Doñana is. Now, the park is seriously endangered due to uncontrolled water exploitation and climate change.

iHola! (Hello!) I'm Marisol and I live in Spain, in the province of Seville, Andalucía. The region I live in is quite important in Spain, because of the strawberry greenhouses. I love strawberries; they are my favourite fruits! They're sweet and tasty, but they need a lot of water and energy to be cultivated.





Close to us there is the UNESCO national park Doñana. Coto de Doñana, as we say, was Spain's most important wetland. It is home to several animal species. Some are typical for Spain, some even in danger of extinction. And also many migratory birds from Africa live here. When I visited the park the last time, I saw the Iberian lynx, an endangered species!

It might sound odd to you, but there is actually a connection between the Doñana wetlands and strawberries: Since the 1980s, companies have taken more and more water from the Doñana wetlands to water strawberries and many other agricultural products in their greenhouses. This is not only

often illegal, but also drying up the national park. In conjunction with global warming it has already happened that the park ran out of water. For this reason, more and more animal species are endangered or even disappearing, and the park could also lose its UNESCO World Heritage title.

The European Commission has accused the Spanish government of not doing enough to protect Coto de Doñana and its fauna. It has also been brought to the European Court of Justice. Now, the Spanish government has a plan to restore the park and protect it, but the problem of illegal water exploitation remains. The companies keep taking water from the park because people like to eat fresh strawberries all year long instead of just buying them during their season and from their own country. This is something I don't understand. Strawberries are tastier when they're seasonal and local, and they also need fewer resources to be cultivated!



iAdiós! (Bye!) Yours, Marisol.

Questions and tasks on the Spanish climate travel station

For the younger ones

- Find Sevilla on a map (it's in the south of Spain). How far is it from the Doñana national park?
- Find a seasonal calendar. What are your favourite fruits and vegetables? Are there any you haven't tried yet?
- Have you noticed a difference in the taste of strawberries (or other fruit) in summer and in winter?
- How can you conserve seasonal strawberries if you want to eat them in winter?

 There are several ways to conserve seasonal fruits: you can make jam, jelly or marmalade, ferment them or you can simply put them into the freezer.

Task: What's your favourite way to eat strawberries? Send us your favoured recipe for fresh strawberries and for processed/preserved strawberries.

For the older ones

- Why do you think it is environmentally better to buy seasonal and local fruit and vegetables?

 Fruit and vegetables create CO₂ emissions, especially for transport. If they're not seasonal, they need more energy to be produced (e.g. heating of greenhouses) and the CO₂ emissions rise.
- Do you know national parks in your region or your country? Why do we need to protect them?

 The national parks are important for tourism in the region, for biodiversity and sometimes (like for the Doñana park) for water resources.
- What is groundwater and why is it important?
 Groundwater is a source of water that lies under the ground. It is important for all vegetation but also for agriculture and as a source of drinkable water. In fact, groundwater is cleaner than surface water e.g. from rivers and lakes, because it is filtered by several layers of soil and rock.

Tip: Check the teaching guide (pp. 25-32) for further ideas, and inspiration on climate-friendly food. Moreover, take a look at https://ourworldindata.org/environmental-impacts-of-food to find out how much CO₂ certain food causes.