

本集内容

Using cow waste to fight climate change 利用牛粪对抗气候变化

学习要点

有关“soil quality 土壤质量”的词汇

边看边答

How much of the world's population is affected by soil degradation?

文字稿

Soil **erosion** - a double problem. Here in the east of England, this isn't smog in the air, it's soil on a hot, windy day. Losing soil like this lowers our ability to grow crops. It also releases carbon trapped in the earth and that contributes to climate change.

土壤**侵蚀**，一个双重问题。在英格兰东部，这不是空气中的烟雾，而是在炎热多风的日子土壤被风刮起来的景象。土壤这样流失降低了我们种植农作物的能力。它还释放出困在泥土中的碳，加剧气候变化。

Soil **degradation** is a problem, said to affect almost half the world's people. Look at this tsunami of dust last year in Phoenix, Arizona. It's the result of a spectacular storm. For most farmers, soil loss is a creeping problem that's only noticed too late.

土壤**退化**是一个问题，据说影响全球近一半的人口。看看去年亚利桑那州凤凰城的沙尘暴。这是一场壮观风暴的结果。对于大多数农民来说，土壤流失是一个缓慢蔓延的问题，只是人们发现得太晚了。

Joanna Clark, Reading University

Soils are really important for climate change as well because they store a lot of carbon.

There's three times more carbon stored in soil than there actually is in the atmosphere. So you imagine if all that carbon was released from the soil into the atmosphere, we'd have...

This is the runaway climate change that people are concerned about.

乔安娜·克拉克 英国雷丁大学

“土壤对气候变化也非常重要，因为它们储存了大量的碳。土壤中储存的碳是大气中的三倍。所以你可以想象，如果所有的碳都从土壤中释放到大气中，我们会面临人们所担心的气候变化失控。”

So what to do? Well, we know cows' burps are a problem for climate change, but their **dung** also helps put carbon back into the soil. So, this mobile dairy in the south of England may prove part of a solution. It means cows spread their dung across the fields, not leave it in the farmyard. That way nutrients and carbon from the **pasture** return to the soil.

那该怎么办呢？我们知道奶牛打嗝是造成气候变化的一个问题，但它们的**粪便**却有助于将碳放回土壤中去。因此，英格兰南部的这个流动奶牛场可能是解决方案的一部分。奶牛把它们的粪便撒在田野上，而不是留在农家院子里。这样，**牧草**中的养分和碳就会回到土壤中。

Here's the evidence. This field with its light stony soil is **depleted** from crops grown with chemical fertilisers: see the much darker carbon-rich soil in the far ploughed field previously fertilised by cows.

证据在这里。这片有着浅色石质土壤的土地，由于使用化肥种植的作物而变得**贫瘠**：看看这片以前由奶牛施肥的、深耕过的土地，其碳含量要高得多。

词汇

erosion 侵蚀，流失

degradation 恶化，退化

dung （牛、马等动物的）粪便

pasture 草地，牧场

depleted 减少的，贫瘠的

视频链接

<https://bbc.in/2YIg2MG>

问题答案

Soil degradation is said to affect almost half the world's people.