
ARCTIC BOREAL
VULNERABILITY
EXPERIMENT

1
00:00:02,220 --> 00:00:03,220
[MUSIC]

2
00:00:03,220 --> 00:00:05,310
Let's take a quick peek at NASA's ABOVE mission.

3
00:00:05,310 --> 00:00:09,350
ABOVE is the Arctic Boreal Vulnerability Experiment,
which is getting down and dirty into the study

4
00:00:09,350 --> 00:00:13,830
of climate change in the arctic and boreal,
or far northern, regions of our planet.

5
00:00:13,830 --> 00:00:17,510
NASA scientists are gaining a better understanding
of the vulnerability and resilience of the

6
00:00:17,510 --> 00:00:19,480
delicate and large ecosystems there.

7
00:00:19,480 --> 00:00:24,270
Well, we're trying to quantify how climate
change is impacting fires.

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00:00:24,270 --> 00:00:31,470
So, the idea is that as the planet gets warmer,
we're seeing hotter and drier summers, and

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00:00:31,470 --> 00:00:34,640
that in turn is resulting in more severe fires.

10
00:00:34,640 --> 00:00:40,550
And what I mean by severe fires is a greater
consumption of the soil.

11
00:00:40,550 --> 00:00:46,900
So, historically, or in the past, the soil
would burn just a minimal amount, and now

12
00:00:46,900 --> 00:00:49,870
maybe we're seeing a deeper burning.

13
00:00:49,870 --> 00:00:54,540
In these ecosystems, a lot of carbon is stored
in that soil layer.

14
00:00:54,540 --> 00:01:00,260
So, if we're burning really old carbon that
had accumulated over numerous fire cycles,

15
00:01:00,260 --> 00:01:05,119
so hundreds, maybe even thousands of years
old, that's going to be released into the