

Black Truffle Production in Europe Could End Completely Due to Climate Change

MIKE POMRANZ | December 04, 2018

“These findings indicate that conservational initiatives are required to afford some protection to this important and iconic species...(including) the expansion of truffle plantations into new territories of a more favorable future climate,” says lead researcher Paul Thomas from the Faculty of Natural Sciences (and Chief Scientist for American Truffle Company).



This week, truffle lovers got some pretty good news about their favorite upmarket fungus: Rare and pricey white truffles have been significantly less rare and pricey this year. But here's an unfortunate prediction that could really ruin a truffle fan's day: Scientists are predicting that climate change may potentially put a permanent end to Europe's truffle industry before the end of the century.

A paper from Scotland's University of Stirling entitled "A risk assessment of Europe's black truffle sector under predicted climate change" and published last month in *Science of the Total Environment* included some potentially dire findings. "Our new study predicts that, under the most likely climate change scenario, European truffle production will decline by between 78 and 100 per cent between 2071 and 2100," explained lead researcher Paul Thomas from the Faculty of Natural Sciences. As *Modern Farmer* points out, truffles have proven extremely difficult to cultivate, meaning the majority of truffles are foraged in the wild. This also means the fungi are more beholden to natural weather phenomenon.

But the bad news doesn't stop there. "However, the decline may well occur in advance of this date, when other climate change factors are taken into account, such as heatwaves, forest fires, drought events, pests and disease," Thomas continued. "We risk losing an industry worth hundreds of millions of pounds to the economy. However, the socio-economic impact of the predicted decline could be substantially larger as truffle harvesting and related activities form a key component of local history and cultural activity."

Thomas and his team said they came to their conclusion by looking at 36 years of truffle production records in France, Spain, and Italy, and then compared those numbers to past weather conditions and future weather projections under a state-of-the-art climate change model.

Understandably, these unsettling predictions were accompanied by an immediate call for action. "These findings indicate that conservational initiatives are required to afford some protection to this important and iconic species. Potential action could include the expansion of truffle plantations into new territories of a more favorable future climate," Thomas said. "Management strategies should further include mulching materials and cultivation practices to mitigate soil temperature fluctuations and conserve soil moisture." Of course, we could also try to, you know, stop climate change in general, but the world hasn't been doing so great with that strategy so far.