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## **The Case of the Shrinking Sheep**

By [KENNETH CHANG](#)

On a remote Scottish island, the sheep are shrinking, and the cause appears to be the warming of winter.

The wild Soay sheep that live on the island of Hirta in the North Atlantic have been under careful scientific observation since 1985, partly because the island ecosystem is a simple one consisting of the sheep and the vegetation they eat.

Timothy Coulson, a professor of population biology at Imperial College London, and his colleagues analyzed the sheep data and found that the weight of the average female Soay has slimmed about three ounces a year, or about 5 percent over the past quarter-century.

That was somewhat surprising as larger sheep have better odds of surviving, and evolution tends to favor those that are stronger.

But thanks to changing climate, the survival of the fittest has become a bit easier, enabling more of the less fit to survive. Fall lasts now later into the year and spring arrives earlier and more of the smaller lambs, which once perished in winter, now survive to their first birthday.

“As the winters have become shorter, the strength of selection has been reduced a little bit,” Dr. Coulson said.

The findings were published Thursday by the journal *Science* on its Web site.

Further research will look at how much of the shrinkage is caused by a shift in sheep [genetics](#) and how much is the “young mum” effect where the lambs of young mothers are smaller because the mothers themselves are not yet fully grown.

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