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## The downside to long lashes

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By [Elizabeth Pennisi \(/author/elizabeth-pennisi\)](#) | 7 January 2015 2:15 pm | [1 Comment \(/biology/2015/01/downside-long-lashes#disqus\\_thread\)](#)

**WEST PALM BEACH, FLORIDA**—Some women will go to great lengths for longer lashes. But they may be doing their eyes a disservice. Eyelashes are

important for keeping eyes moist and clean, and when lashes get too long they don't do these jobs as well, researchers reported here this week at the annual meeting of the Society for Integrative and Comparative Biology. Scientists have long thought that eyelashes either protect the eye from the sun or catch dust that might otherwise land in the eye. But researchers at the Georgia Institute of Technology wondered if lashes did more. They first measured lash length and eye width in 22 preserved mammals ranging in size from hedgehogs to giraffes. In all species, lash length was about one-third eye width, suggesting lashes had evolved to be a particular size relative to the eye. The researchers then made artificial eyes, attaching synthetic lashes and other materials to small water-filled aluminum caps and monitoring the "eyes'" water loss and particle accumulation in a small wind tunnel. [The lashes reduced evaporation and particle deposition by 50%, as they trap a protective layer of air on top of the eye \(http://sicb.org/meetings/2015/schedule/abstractdetails.php?id=714\)](http://sicb.org/meetings/2015/schedule/abstractdetails.php?id=714), they reported. But when lashes are too long, they no longer trap air and instead funnel airflow onto the eye, likely increasing evaporation and particle deposition. These and future studies of lashes could lead to passive self-cleaning devices for optical sensors and planetary rovers and other machines used outdoors, the researchers suggest.

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Interesting, but what about the width of the lashes, and the number, location and thickness of follicles?

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