

RESEARCH HIGHLIGHTS

Selections from the scientific literature

AGROECOLOGY

Bees are better for strawberries

Bee pollination doesn't just boost yields of fruit crops — it also improves fruit quality, at least in strawberries.

Strawberry plants can self-pollinate, or be pollinated by wind or bees. Björn Klatt of the University of Göttingen in Germany and his colleagues grew the fruit using a permeable plastic to eliminate wind and bee pollination, or fine-mesh bags to exclude just bees. They found that berries grown uncovered but pollinated by bees were heavier, redder, and had a longer shelf life and a more desirable sugar-to-acid ratio than wind- or self-pollinated berries.

The researchers say that bee pollination boosts hormonal growth regulators that improve the quality of the berries.

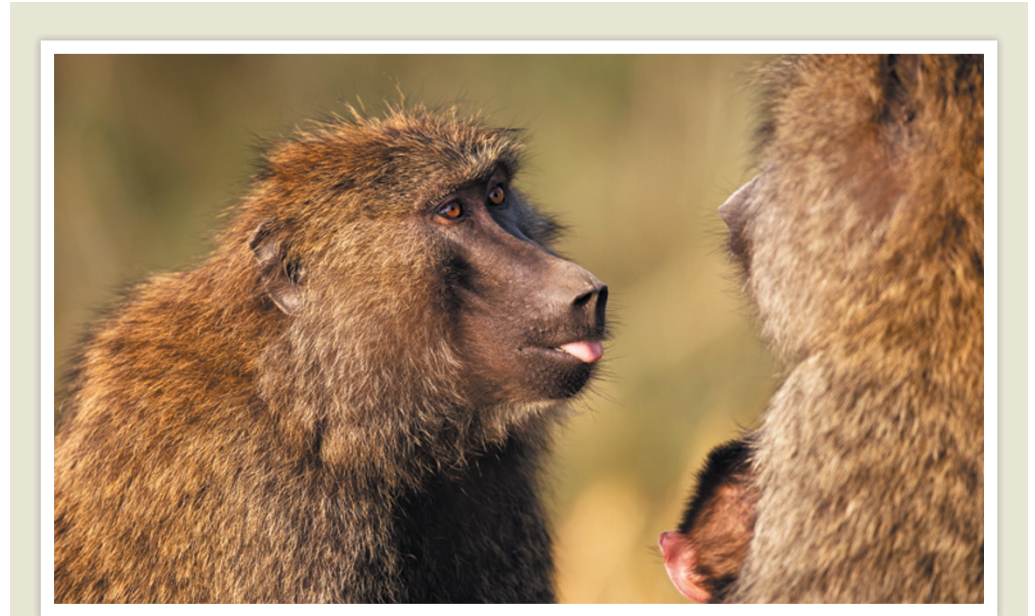
Proc. R. Soc. B <http://doi.org/qcg> (2013)

CLIMATE CHANGE

Melting ice spurs wild weather

Recent weather extremes during summer in the Northern Hemisphere, such as the 2012 drought in the United States (pictured), seem to be linked to loss of Arctic sea ice and reductions in snow cover.

Qihong Tang of the Institute of Geographic



ANUP SHAH/CORBIS

ANIMAL BEHAVIOUR

Baboons know when to be noisy

Baboons can tell whether they need to make a ruckus to get attention or if they already have a captive audience.

To see whether the animals adjust their mode of communication according to the level of an observer's attention, Marie Bourjade at Aix-Marseille University, France, and her colleagues tempted 16 captive olive baboons (*Papio anubis*; pictured) with a tasty fruit treat. The experimenters stood facing the animals with their eyes either open or closed,

or turned away from the animals.

Baboons made more begging hand gestures when experimenters had their eyes open. When the experimenters' eyes were closed or their backs were turned, the monkeys tended to make noisy banging actions instead. Attention-getting gestures in monkeys may have been a starting point for the evolution of intentional vocal communication in great apes and humans, the researchers suggest.

Anim. Behav. <http://doi.org/qcb> (2013)

Sciences and Natural Resources Research in Beijing and his colleagues compared meteorological records with satellite observations of snow and ice. They found that Arctic sea-ice retreat and, to a lesser degree, decreased snow cover alter large-scale atmospheric circulation patterns — for example, by shifting the jet stream northwards. These changes typically cause heatwaves and other extreme weather events at mid-latitudes.

The results could help to improve seasonal and longer-term climate forecasts, the

team says.

Nature Clim. Change <http://doi.org/qds> (2013)

ASTROPHYSICS

Trio of distant quasars found

Astronomers have discovered three distant quasars that will allow them to probe the conditions of the early Universe.

A team led by Bram Venemans at the Max Planck Institute for Astronomy in Heidelberg, Germany,

discovered the active galactic nuclei using the European Southern Observatory's Visible and Infrared Survey Telescope for Astronomy Kilo-degree Infrared Galaxy (VIKING) survey. The findings bring the number of known quasars that are beyond the detection limit of visible-light cameras to four.

The authors say that studying the quasars, which are thought to be powered by supermassive black holes more than 1 billion times the mass of the Sun, will shed light on how massive galaxies and black holes formed

VICTOR J. BLUE/BLOOMBERG VIA GETTY