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Rats transported through a patterned environment do not recover pattern vision after serial visual cortex lesion. Rats allowed free movement in such environments do recover. See page 265. [Michael J. Danley, Huntington Institute of Applied Medical Research. Pasadena, California]
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COVER

Fatal embrace. Photuris female (left) has seized a male of another species and is chewing on his thorax. When 
she is finished, little will remain except his eyes, feet, and wings. These females attract foreign males to them 
bymimicking the mating signals of their females. See page 432. [J. E. Lloyd, Department of Entomology, 
University of Florida, Gainesville]
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Gray seal (Halichoerus grypus) spends most of its life in the sea and can sleep on the surface, underwater, and on land. The seal proceeds from active waking (upper left) to quiescent waking (upper center) to rapid eye movement sleep (upper right) to slow-wave sleep (lower six views). See page 553. [S. H. Ridgway and P. L. Romano, U.S. Navy, San Diego, California]
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Nickel screen whose holes are filled with the eggs of the seaweed *Pelvetia*. The eggs have a known orientation in the holes and such screens are used to measure the ion fluxes into and out of the two poles of these eggs. Each hole has a diameter of 75 micrometers. See page 70. [Kenneth R. Robinson, Purdue University, Lafayette, Indiana]