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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 ex-
cept his eyes, feet, and wings. These females attract foreign males to them
by mimicking the mating signals of their females. See page 432. [J. E.
Lloyd, Department of Entomology, University of Florida, Gainesville]
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### COVER

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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COVER

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]