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Cover photograph (Copyright © 2007, American Society for Microbiology. All Rights Reserved.): Section of a stratified microbial mat. The hypersaline microbial mats at Guerrero Negro, Baja California, extend over more than 100 km² and comprise a major deposit of highly active biomass. Typically 6 to 10 cm thick, the mats are stratified through little-understood biological and geochemical processes. Complex chemical gradients support a spectacular diversity of microbial life. Photo by John R. Spear and Norman R. Pace. (See related article in the May 2006 issue: volume 72, page 3685.)