Editorial
Shades of the Sacred Grove ..................................................... 113

Articles
Organelle Systems and Biological Organization: C. F. Ehret .................. 115
Structural and developmental evidence leads to a new look at our concepts of biological organization.

Trends in Polarography: J. Heyrovsky ........................................ 123

Science in the News
“Health for Peace” Bill Passed; AAAS-Westinghouse Science Writing Competition Announced; AAAS Theobald Smith Award .................. 131

Book Reviews
The American Voter, reviewed by P. H. Odegard; other reviews .................. 138

Reports
Marine Planation of Tropical Limestone Islands: N. D. Newell ............... 144
Locomotor Activity of Land Crabs during the Premolt Period: D. E. Bliss 145
Late Tertiary Microflora from the Basin and Range Province, Arizona: J. Gray 147
Avian Uptake of Fission Products from an Area Contaminated by Low-Level Atomic Wastes: W. K. Willard ............................... 148
Antiozonants To Protect Plants from Ozone Damage: S. Rich and G. S. Taylor 150
Serial Lactic Dehydrogenase Activity in Plasma of Mice with Growing or Regressing Tumors: V. Riley and F. Wroblewski ....................... 151
Communicative Mandible-Snapping in Acrididae (Orthoptera): R. D. Alexander 152
Dialysis of Certain Sugars through Cellophane: M. B. Templeman and L. M. Marshall 153
Contribution of Hardtack Debris to Contamination of the Air during 1959: L. B. Lockhart, Jr., et al. ........................................ 154

Departments
Letters from J. B. Sykes; J. H. Steward and A. Leeds; W. F. Longgood and W. J. Darby 110
Preserving Our Science Archives; Forthcoming Events .......................... 158

Cover
A cross section through the gullet region of the ciliated protozoan Paramecium bursaria. The round dark objects are the symbiotic alga Chlorella. The numerous clear ellipsoids below the surface are the trichocyst bodies, and the irregularly shaped dark body near the center is the macronucleus. The food-intake passage is lined by about 1000 cilia arranged in 12 columns. The row of 12 shown in the picture is composed of three groupings, with four cilia to each group spaced 0.46 microns apart on centers. See page 115. [Photograph by L. E. Roth, Argonne National Laboratory, Lemont, Ill., from C. F. Ehret and E. L. Powers, “The cell surface of Paramecium,” Intern. Rev. Cytol. 8, 97 (1959)].