

INDEX TO VOLUME 64

- Albahaca morada*, possible oral hypoglycemic factor in, 223
- Algae, from west end of Lake Erie, 43;
Monostroma and *Enteromorpha* in Ohio, 272
- Allegheny Plateau, soils in, 385
- Amphibians of the Erie Islands, 11
- Appalachian Plateau, future land use in, 106;
soils in, 385
- Arthropoda, crayfish (*Faxonella clypeata*),
effect of light and darkness on, 185
- Asterocampa cellis* (Hackberry Butterfly) on
South Bass Island, 1
- Athelstane area, Wisconsin, Precambrian
geology of, 57
- Auglaize County, bird records from near
Lake St. Mary, 25
- Baby, Raymond S., 36
- Ballana*, monographic study of, 305
- Bat, gray, from Kentucky, 63
- Bat Cave, Kentucky, gray bat from, 63
- Beans, photosynthetic rhythms in, 378
- Beavers, A. H., 417
- Beckman, Walter A., Jr., 57
- Behavior, mating, of house fly, 264
- Behavioral Aspects of Ecology (Book Re-
view), 274
- Bernath, G. E., 168
- Bernhagen, Ralph J., book review by, 40
- Birds, records in western Ohio, 25; songs of
thrushes, wrens, and mockingbirds, 195;
avian predation on pheasants, 401
- Bonner, John T., book by, 40
- Book Reviews
Behavioral Aspects of Ecology, by Peter
H. Klopfer, reviewed by Thomas H.
Langlois, 274
Geology of the Silurian Producing Zones
in the Moreland Oil Pool, Wayne
County, Ohio, by H. Gray Multer,
reviewed by Ralph J. Bernhagen, 40
The Ideas of Biology, by John T. Bonner,
reviewed by Carl Venard, 40
To know a Fly, by Vincent G. Dethier,
reviewed by Carl Venard, 63
- Borror, Donald J., 195
- Brandon, Ronald A., 252
- Brant, Russell A., 68
- Briggs, W. M., 168
- Broad, A. C., 239
- Buprestidae, two new forms and distribution
records, 376
- Cain, J. Allan, 57
- Cave animals and entropy, 221
- Clam, Asiatic, extension of range of, 428
- Clark, Clarence F., 25
- Coal overburden, geology of, 68
- Coals, Lower and Middle Kittanning,
stratigraphy between, 41
- Coash, J. R., 207
- Coleoptera, a new species of *Eleodes* from
Colorado, 60; two new Buprestidae and
distribution records, 376
- Colorado, a new species of *Eleodes* from, 60
- Concentration, initial, the effect of, in the
aromatic nucleophilic substitution reac-
tion, 275
- Corbicula fluminea*, extension of range of, 428
- Crangon septemspinosa*, larval development
of, 239
- Crayfish, effect of light and darkness on,
185; salinity tolerances of, 403
- Crops, strontium-90 accumulation by some,
371
- Crustacea, *Miktoniscus* isopods from eastern
United States, 51; larval development of
Crangon septemspinosa, 239
- Dambach, Charles A., 65
- Darkness, effect on retinal pigment of cray-
fish, 185
- Deamer, David W., 221
- DeLong, Dwight M., 305
- DeLong, Richard M., 41
- Dethier, Vincent G., book by, 63
- Desert shrubs, reduction in solar energy by,
250
- Dickman, Irving I., 165
- Diller, Oliver D., 65
- Dogs, Hopewellian, 36
- Dydrophilic surfaces, 215
- Eleodes*, a new species of, from Colorado, 57
- Enteromorpha*, occurrence in Ohio, 272
- Entropy, 221
- Equus*, Pleistocene, from Sandusky County,
423
- Faxonella clypeata* (crayfish), effect of light
and darkness on, 185
- Fly, house, mating behavior of, 264
- Fye, R. L., 264
- Geiger, Donald R., 409
- Geologic parent materials of soils in un-
glaciated Allegheny Plateau, 385
- Geology of the Silurian Producing Zones in
the Moreland Oil Pool, Wayne County,
Ohio (Book Review), 40
- Germany, strip-mine reclamation in, 75
- Gilbert, Gareth E., 63
- Gillogly, L. E., 168
- Goslin, Robert M., 63
- Hackberry Butterfly on South Bass Island, 1
- Haghiri, F., 371
- Hanna, George P., Jr., 120
- Hauser, Edward J. P., 27
- Hepaticae (liverworts) of Ohio, 177
- Hoare, R. D., 207; 427
- Hole, Thornton, 207
- Homoptera, monographic study of *Ballana*,
305
- Hopewell-age dogs, 36
- Horse, Pleistocene, from Sandusky County,
423

- Hostetler, Wayne, 275
 House fly, studies in mating behavior of, 264
 Howe, George F., 378
 Hyslop, James, 157
- Initial concentration, the effect of, in the aromatic nucleophilic substitution reaction, 275
 Innis, Charles, 207
 Isopoda, *Miktoniscus*, from eastern United States, 51
- Jones, Robert L., 417
- Kendall, Arthur, 403
 Kentucky, gray bat from, 63
 Kessler, Francis W., 401
 Key to larvae of Ohio salamanders, 252
 Klopfcr, Peter H., book by, 274
 Knabe, Wilhelm, 75, 132
 Knoll, Josef N., 376
 Kottman, Roy M., 67
 Kurz, Philip F., 215
- Labrecque, G. C., 264
 Lake Erie, Hackberry Butterfly on South Bass Island, 1; amphibians and reptiles of Erie Islands, 11; Algae from west end of, 43
 Lake St. Mary bird records, 25
 Langlois, Marina H., 1
 Langlois, Thomas H., 1; 11; book review by, 274; retirement of, as Book Editor, 384
 Larvae of Ohio salamanders, key to, 252
 Larval development of *Crangon septemspinosa*, 239
 Leafhoppers, monographic study of, 305
 Lepidoptera, Hackberry Butterfly on South Bass Island, 1
 Lessig, Heber D., 385
 Light, effect on retinal pigment of crayfish, 185
 Limstrom, G. A., 112
 Liverworts of Ohio, 177
 Lorain County, mastodon record in, 375
 Lower Kittanning Coal, stratigraphy above, 41
 Luthy, Nadia, 223
- Markers, on pheasants, 401
 Martinez-Fortun, Ortelio, 223
 Maryland, salinity tolerance of two crayfishes, 403
 Mastodon record in Lorain County, 375
 Mating behavior of flies, 264
 McDonough, Walter T., 250
 McKenzie, L. J., 417
 Mercer County, bird records from near Lake St. Mary, 25
Metagonimoides oregonensis, in Ohio raccoons, 400
 Michigan, opaline microfossils in soils of, 417
 Microfossils, opaline, in Michigan soils, 417
 Middle Kittanning Coal, stratigraphy below, 41
Miktoniscus (isopods), from eastern United States, 51
 Miller, Harvey A., 177
 Mimidae (mockingbird) songs, 195
 Mobberly, William J., Jr., 185
 Mockingbird songs, 195
Monostroma, occurrence in Ohio, 272
 Morse, H. H., 168
 Muchmore, William B., 51
 Multer, H. Gray, book by, 40
 Murvosh, Chad M., 264
Musca domestica, house fly, studies in mating behavior of, 264
 Myer, Donal G., 400
Myotis grisescens (gray bat) from Kentucky, 63
- Newman, D. W., 258
- Ohio River, extension of range of Asiatic Clam in, 428
 Opaline microfossils, in Michigan soils, 417
 Oral hypoglycemic factor in *Albahaca morada*, 223
Ophiacodon from Ohio, 217
 Organic resin films, in conversion of zinc oxide, 215
 Ohio Journal of Science, change in Business Manager, 63; list of reviewers, 64; books received for review, 284; retirement of Book Editor, 384; resignation of Editor-in-Chief, 429
 Ohio Academy of Science, Annual Report, 285
- Particles, strange, 225
 Peccary from Sandusky County, 207; radiocarbon date on peccary, 427
 Pelycosaur, *Ophiacodon*, from Ohio, 217
Phaseolus vulgaris, photosynthetic rhythms in, 378
 Pheasants, avian predation on, 401
 Photosynthetic rhythms in *Phaseolus vulgaris*, 378
 Plants, vascular, from southwestern Ohio, 283
 Plastids, lipids of, 258
Platygonus (peccary) from Sandusky County, 207
 Pleistocene, peccary from Sandusky County, 207; radiocarbon date on peccary, 427; mastodon from Lorain County, 375; *Equus* from Sandusky County, 423
 Pojeta, John, Jr., 428
 Popham, Richard A., 63
 Potter, Martha A., 36
 Precambrian geology of northeastern Wisconsin, 57
 Predation, avian, on pheasants, 401
 Program of strip-mine reclamation in Ohio, 165
- Raccoons, *Metagonimoides oregonensis* in, 400
 Radiocarbon date on Pleistocene peccary, 427
 Randall, C. A., 225
 Reaction, the aromatic nucleophilic substitution reaction, 275

- Reinheimer, John D., 275
 Reptiles of the Erie Islands, 11
 Resin films, organic, in conversion of zinc oxide, 215
 Retinal pigment of crayfish, effect of light and darkness on, 185
 Revegetation, of strip-mined land, 112; of strip-mined spoil banks, 168
 Rubiaceae of Ohio, 27
- Salamanders, Ohio, key to larvae, 252
 Salinity tolerances of some crayfish, 403
 Samples collection of vascular plants, 283
 Sandusky County, Pleistocene peccary from, 207; radiocarbon date on peccary, 427; Pleistocene *Equus* from, 423
 Shrubs, desert, reduction in solar energy by, 250
 Schwartz, Frank J., 403
 Sitterley, J. H., 106
 Smith, H. G., 168
 Soils, in unglaciated Allegheny Plateau, 385; opaline microfossils in, 417
 Solar energy, reduction by desert shrub cover of, 250
 South Bass Island, Hackberry Butterfly on, 1
 Spoils, of strip mines, chemical weathering in, 125
 Stansbery, David H., 429
 Steller, Dorothy La Londe, 423
 Stem, temperatures and incisions, effect on translocation of water, 409
 Stephens, John J., 217
 Stomatal opening, degree of, related to photosynthetic rhythms in *Phaseolus vulgaris*, 378
 Strip-mine reclamation symposium, 65-175
 Struthers, P. H., 125
 Stuckey, Ronald L., 283
 Sturgeon, Myron T., 41
- Surrarrer, T. C., 375
 Symposium, on strip-mine reclamation, 65-175
- Taft, Clarence E., 43; 272
 Tesmer, Charlise Ann, 239
 The Ideas of Biology (Book Review), 40
 Thrush songs, 195
 To Know a Fly (Book Review), 63
 Tolerances of salinity, of some crayfish, 403
 Trematoda, *Metagonimoides oregonensis* in, 400
 Triplehorn, Charles A., 60
 Troglodytidae (wren) songs, 195
 Turdidae (thrush) songs, 195
- Venard, Carl, book reviews by, 40; 63
 Vegetables, strontium-90 accumulation by some, 371
 Vertebrata, amphibians and reptiles of the Erie Islands, 11; bird records from Lake St. Mary, 25; songs of thrushes, wrens, and mockingbirds, 195; dogs of Hopewell age, 36; gray bat from Kentucky, 63; Pleistocene peccary, 207, 427; fossil pelycosaur from Ohio, 217; key to larvae of Ohio salamanders, 252; record of Pleistocene mastodon, 375; avian predation on pheasants, 401
- Water, relation to strip-mine operation, 120; translocation, in stems, 409
 Weathering of strip-mine spoils, 125
 Williams, Russell R., 400
 Wisconsin, northeastern, Precambrian geology of, 57
 Wren songs, 195
- Zinc oxide, chemical conversion, 215