

INDEX

- ADALIS, DOROTHY, 233
ADLER, JEFFREY, 231
Adriamucin, 101
Aedes Triseriatus, 204, 208
Aerial Photographs, Historical, 224
Aerial Surveys of Flood Plains, 224
Agrotis ipsilon, black cutworm, 218
Air Pollution, 231, 233
Air Pollution—Effects on Crops, 234
Air Pollution Effects of Vegetation, 233
Air Pollution, Perception of, 320
Air Quality, Coal Mine, 250
Air Quality Standards, 320
ALBRIGHT, JACK L., 405
ALDRICH, JAMES R., 353
Algae, 148
Altered Liver Tumorigenesis, 100
Alton site, 84
Amish Children, 83
Analgetics, 136
Anatomy of *Arundo*, 92
Angelica atropurpurea L. in Indiana, 91
Animal Behavior, 207, 405
ANSELMINO, LISA, 103
Antagonists, narcotic, 136
Anthropology, 82
Antisperm, 405
Apical Growth, 97
Apolynaceae, 94
Archeological zones, 82
Argulus appendiculosus, 404
ARMENTANO, THOMAS V., 234
Art, Mexican, 82
Arthropods, economic, in Indiana, 210
Artificial ventilation, 404
Arundo donax L., 92
Aspen, 146
AULT, CURTIS H., 275
Axoplasmic Transport, 102
- B-lactam synthesis, 131
BACONE, JOHN A., 359
Bacteria, Isolation, 340
BALESTRA, M., 404
BARR, RITA, 343
Barrens vegetation, 147
Bats, 205
BEACHY, PHILIP A., 97
Bedrock, 272
BENDA, ROBERT S., 404
BENNETT, GARY W., 205
Benthos, 173
Benzazapropellanes, 136
BERRY, WILLIAM J., 208
Beta-alanine, 103
Biological Survey Committee, 12
Birds of Indiana, 68
Black Walnut, germination, 94
BLACKBURN, JANIE K., 340
BLAIR, B. O., 151, 382, 400
BLOOM, WILLIAM W., 327
BOARDMAN, LARRY, 131
BOCK, P. L., 129, 130
BODNER, G. M., 381
BONEHAM, ROGER F., 310
Brassicaceae, 352
BRATT, MARVIN H., 380, 382, 383
British science, nineteenth century, 330
BRODIE, GREGORY A., 300
BROWN, EARLE (necrology), 44
BRYSON, SCOTT J., 341
BUCK, JOHN, 232
BURKE, CHRISTOPHER B., 191
- Calcium-binding protein, 102
California Encephalitis virus, 204
Calmodulin, 102
CAMPAIGNE, E., 136
Cancer, 114
Cancer therapy, 103
Cantaloupe Production in Indiana, 215
Carcinogens Removal of, 231
CARNAHAN, WALTER H., 350
Caryophyllaceae, 98
CATT, PAUL E., 133
Cavendish Laboratory, 330
Caves, Indiana Rice Rat bones in, 425
CHANEY, W. E., 215
CHANG, WILLIAM, 340
Charophyte morphology, 356
Charophyte taxonomy, 356
Chemistry teaching, 381
Chironomus riparius, 207
Chloroform Removal, 231
Chlorophyll estimation, 340
Chlorophyta, 148
Chloroplasts, 343
Chromatography, 133
Cinnamic Acid, 99
Claridon Prairie, 94
Clark County, 355
Clay mineralogy, 384
Clean Lakes Program, 180
Climatology, 386
Clostridium welchi, 105
COCHRAN, DONALD R., 82
Cockroach Control, 205
Committees, Academy of Science, 5
Computerized Literature Bank, 39
Constitution, of the Academy, 57
COOK, DONALD J., 131
Cooperative Education, 382
CORRIGAN, ROBERT M., 205
Cottontail rabbits, ectoparasites, 418
CRAIG, GEORGE B. JR., 208
CRANE, FREDERICK L., 101, 343
Crayfish, 232
Crayfishes Cave, 147

- CREEK, KIM E., 99
 CROVELLO, THEODORE J., 39, 352, 354
Culex restuans, 208
 Cuticle, 103
 Cuticular variation, 94
 Cyclotron Resonance, 351
 Cytochalasin A, 97
- DAILY, FAY KENOYER (necrologist), 44, 356
 DALE, ROBERT F., 386
 DAVENPORT, D. A., 382
 DAVIS, D. G., 225
 DAVIS, PATRICIA G., 272
 DECKER, TIMOTHY J., 232
 Deermice, 404
 Dehydration of 2-Methyl-1-Phenylcyclohexanol, 130
 DELLEUR, J. W., 188
 DENNING, BERNARD E., 231
 DESANTO, JANICE T., 130
 DEUTSCHER, S. L., 99
 DEWEESE, ROBERT, 130
 DEYOUNG, DONALD B., 350
 DILCHER, DAVID L., 95
 DINEEN, CLARENCE F., 173
 DiNOTO, VINCENT A., 350
 Diols, 129
 DOLPH, GARY E., 94, 381
 Dragonflies, American, 328
Dryophyllum mooni, 93
 DUNN, HOWARD E., 130, 231, 255
- Eastern White Pine, 234
 EBERLY, KARA, 103
 Eclipse of, 79-274
 Ecology Aquatic, 148
 Ecology, Terrestrial, 142
 Ectoparasites, of cottontail rabbits, 418
 EDMONDS, RICHARD F., 246
 EIGENMANN, CARL H., 144
 Electro chemistry, 382
 Electron Transport, 343
 Electronic polarizations, 129
 ELLIOTT, WILLIAM L., 98, 100
 Elwood, Indiana, 232
 Embarrass River, 133
 Endangered Plants, 359
 Enucleated cells, 120
 Environmental Assessment, 231
 Environmental Geology, 300, 310
 Enzyme activity, 128
 Epidemiology, 341
 ESCH, J. L., 407
 Eu (fod)₂, 129
- Fall Meeting, Academy of Science, 22
 Ferritin uptake, 102
 Financial Report, Academy of Science, 31
 FISH, DURLAND, 208
 Fish Pathology, 341
 Flora of Indiana, 353
 Floristic Inventory, 372
 Flow Forecasting, 189
 Forensic Anthropology, 82
- Forest structure, 146
 FORMAN, MICHAEL, 99
Fossil insects, 206
 Fountain County, 310
 FRANZMEIER, DONALD P., 384
 Fungi, 97
- GAMMON, J. R., 143
 GANION, LARRY R., 405
 GARBER, LAWRENCE L., 131
 Gateway Project, 383
 GEHRING, CHARLES L., 380
 GINGERY, WALTER GEORGE (necrology), 45
 Giorgini, 190
 Glacial Lake Quincy, 273
 Glycosyl transferases, 99
 GODISH, THAD, J., 231, 233, 246, 268
 GOECKER, A. D., 382
 Golgi Apparatus, 99, 100
 GOMMEL, WILLIAM R., 274
 GRAFTON-CARDWELL, E. E., 218
 GRAY, DONALD D., 191
 GRAY, HENRY A., 272
 GRAY, LOIS M., 372
 GREENBOWE, THOMAS J., 381
 GRIMSTAD, P. R., 204
 GROLLIG, S. J., Francis X., 82
 GROVE, STANLEY N., 97
 Guanidine hydrochloride, 128
 GUSTAFSON, D. P., 120
- Habitats of mammals, 432
 HALE, EDWARD M., 340
 HALLERBERG, ARTHUR EDWARD (necrology), 47
 Halogen substitution, 129
 Hamilton County, Indiana, 300
 Hamsters, 233
 HAN, JI, 188
 HANKINS, B. J., 146, 151, 400
 HANSEN, UWE J., 350, 351
 HARRIS, PATRICIA A., 351
 Harrison Co., 147
 HAUSER, LARRY A., 352
 Heat Units, 206
 HEDGE, CLOYCE L., 359
 HEINSTEIN, PETER F., 98
 HELLENTHAL, BARBARA J., 354
 HELLENTHAL, RONALD A., 204
 Hemlock Bluff Nature Preserve, 372
 HENDRICKS, ELAINE G., 354
 HENDRICKSON, DONALD A., 340
 Hepatomas, 98
 Herbicide, aquatic, 145
 HERTEL, J. M., 400
 Heusler Fault, 275
 High School Science Projects, 381
 HILST, A. R., 382
 HOBAN, BRIDGET, 208
 HOBBS, III, H. H., 147
 Honey Bees, 215
 Hospitalization and Nosocomial Infections, 341
 HOUCK, MARK H., 189

- Household Carbon Filters, 231
 HOWE, ROBERT H. L., 132, 190, 232
 HOWE, ROBERTA C., 132
 HUBER, R. T., 206
 HUNCHBERGER, ROBERT A., 149
 Hyperthermia, 114
 Hypothyroid, 407
- Illudas, 188
 Indiana Junior Academy of Science, 36
 Indiana University Biological Station, History, 143
 Indians, Pre-history, 84
 Industrial emissions, 320
 Insecticide, 205
 Insect-plant coevolution, 206
 Insects, economic, in Indiana, 210
 Ionophore A-23187, 97
 Iqbal, Zafar, 102
 Isoelectric pH, 132
- Jackson County, 372
 JACKSON, MARION T., 159
 JACOBS, M. E., 103
 JANSEN, MARK, 207
 JARIAL, MOHINDER, 102
 JENSEN, RICHARD J., 353
 Jet Streams, 272
 JOHNSON, ERIC R., 128
 JONES, JAY H., 93
 JORGENSEN, ANDREW, 130
 Jupiter Effect, 350
- KEEN, R. C., 382
 KEITH, JAMES, 147
 KELLER, CLIFTON, 352
 KESSLER, W. V., 114, 407
 KIRKPATRICK, CHARLES M., 145
 KLOSTERMAN, JANE E., 146
 KNOPS, JUDITH F., 353
 KOCH, ROBERT L., II, 255
 KRITSKY, GENE R., 206
 KRUGER, T. L., 129
 KURTZ, ALAN R., 97
- La Crosse Virus, 204
 Lake Monroe, 154
 Lake Restoration, 180
 Lakes, 142
 Lakes, Indiana, 142
Lamprothamnium, transfers to, 356
 Land Use Planning, 300
 LANE, SUSAN LEIGH, 93
 LANGONA, MICHAEL R., 341
 LECHTENBERG, V. L., 400
 LEMBI, C. A., 148
 Lepidoptera: Sesiidae, 225
Lepisosteus osseus, 404
 LESH, THOMAS A., 404
 Lesser Peachtree Borer, 225
 Lice, 204
 LIGHTNER, J. W., 400
 Limnology, Applied, 180
 LINDLEY, BRENDA R., 128
- Liquid Separation, 132
 Liver, Rat, 99
 LLEWELLYN, MARK J., 250
 LLEWELLYN, RALPH A., 250
 Loess in Indiana, 384
 Lotus corniculatus, 151
 LOUCKS, ORIE L., 234
 Low, H., 101
 Lungs, hyperinflation, 404
Lycopersicon esculentum Mill. 146
 LYNG, R. D., 404
- MACKELLAR, W. C., 101
 MACKLIN, WILLIAM D., 95
 Malpighian tubules, 102
 Mammals, small Distribution southwestern Indiana, 432
 Mars, Orbit, 350
 MAXWELL, R. H., 355
 MCCARTHY, JULLANNE, 83
 MCCORMICK, JACK SOVERN (necrology), 49
 MCCrackEN, RICHARD C., 404
 MCGARRAHAN, PATRICK, 386
 MCINTOSH, ROBERT P., 142
 MCKELVEY, PAUL T., 144
 MCKINLEY, MARCUS, 131
 MCNITT, T. J., 404
 MCREYNOLDS, HAROLD E., 142, 143
 MCREYNOLDS, MARK, 154
 Melanoma, 114
 MENDELSON, EDWARD N., 405
 Mennonite children, 83
 Metabolism, 407
Meteorus leiventris (Wesmael), 218
 Mexico, 82
 MEYER, ROBERT W., 210
 MILES, ROBERT D., 274
 Military Remains, 82
 MILLER, EDWARD, 128
 MILLER, RICHARD L., 405
 MILLER, RICHARD W., 234
 MINDO/3, 130
 Molybdenum carbonyl complexes, 131
 MONTGOMERY, ELWOOD B., 328
 Moody Diagram, 190
Morone mississippiensis, 154
 MORRÉ, DOROTHY M., 100
 MORRÉ, JAMES D., 98, 99, 100, 101
 MORRIS, EVERETT F., 92, 327
 MOSBO, J. A., 129, 130
 Mosquitoes, 208
 MOTT, G. O., 151
 Mounds State Park, 82
 Mount Vernon Graben, 275
 MOUZIN, T. E., 215
- N-acetyldopamine, 103
 Narcotic Antagonists, 136
 Nasolabial Groove, 421
 National Museum of Anthropology (Mexico), 82
 Necrology, 44
 NEFF, ANTON W., 105
 NELSON, A. K., 206

- NELSON, CRAIG E., 149
 NELSON, DARRELL W., 260
 Nerve Protein, 102
 New Harmony Fault, 275
 New Members of the Academy, 55
 NISBET, JERRY J., 92
 Nitrogen fertilizer, 394
 Numerical taxonomy, 204
 Nyssa, I, 95

 Odonatology, Development, 328
 Officers, Academy of Science, 3
 OLIVER, JOHN E., 320
 1-substituted tetrazole complexes, 131
 ORGAN, JOHN EWING (necrology), 51
 ORPURT, P. A., 91
Oryzomys, bones, 425
 OSSOM, EKPO, 146
 Ostracods cave, 147
 Otter Creek, 350
 OUNAPU, LOIS M., 129
 Oxygenation Process, 190
 Ozone, 233, 268
 Ozone Effects on Vegetation, 234

 PADMANABHAN, G., 188
Palaeodictyoptera, 206
 Paleo-Indian, 84
 PANG, E. L., 207
 Parasites, new distribution records, 210
 Parasitoid, 218
 Parke County, 310
 Particulate sampling, 246
 Particulates, 250
 Penicilliosis, 92
 PERUCCA, MELISSA, 350
 Phosphatase activities, 100
 Phosphines, 130
 Phospholipase C., 105
 Phosphorus ligands, 129
 Photochemical synthesis, 131
 Photoperiod, 233
 Photoperiod Pretreatments, 268
 Physicists, Mid-Victorian, 330
 Physics Division, Meeting 1935-78, 350
 Physiographic Regions, S. Ind., 290
 Pine, White, 146
 PINGER, R. R., 204, 404
 Plankton, 173
 Plant Communities, 159
 Plants, color, 91
 Plasma Membrane, 101
 Plastocyanin, 343
 Plant Taxonomy, angiosperms, 355
 Plants in Indiana, 353
 Pocket gophers, 204
 Pollen, 98
 Pollution, in river water, 133
 Pollution, water, 350
 Pond communities, 149
 Porter Cave System, 273
 Prairie establishment, 94
 Presidential Address, 68
 PRICE, ROGER D., 204

 Pronase, 128
 Protease, 128
 Protein denaturation, 128
 Pseudorabies Virus, 120
 PURICHIA, NICHOLAS ANGELO (necrology),
 52

 Quercus, 353

 RADEMACHER, LANA, 231
 Radiation, 114
 RAMASARMA, T., 101
 RAO, A. R., 189, 190
 Rat, liver, 412
 Rat, muscle, 412
 Rat, Myeloma, 103
 REED, D. K., 215, 225
 REED, HELEN EVELYNE (necrology), 53
 Refractions, molar, 129
 Residual nitrogen, 394
 Resource management, 143
 REUTER, DIANNE L., 274
 RHYKERD, C. L., 146, 151, 382, 400
 Rice Rat, 425
 RICHARDS, R. L., 425
 RICKETTS, JOHN A., 128
 RINGLESPAUGH, RICHARD, 233
 Riparian zones, 143
 RISLEY, JOHN M., 129
 Roger Cave System, 273
 Root model, 207
 Root growth simulation, 207
 Rodenticide, 205
 ROSSMANN, RONALD, 340
 Runoff, 191
 Runoff, Urban, 188
 RUNSTROM, ERIK S., 205

 Salamander, 421
 SCHUDER, DONALD L., 207
 SCHWARTZ, EUGENE, 129
 Science Education, 380
 Science History, 322
 Scientific institutions, 330
 Scientific method, 380
 SEASLY, THOMAS P., 354
 SENFT II, W. H., 142, 149
 SERETTO, LISA M., 99
 SEVER, DAVID M., 421
 SEVIER, JOHN, 330
 Sewage Treatment, 340
 Sexine development, 98
 SHEA, GERALD J., 272
 SHOUP, JANE R., 98
 SIEFKER, JOSEPH R., 133
 SEWERT, HORST F., 232
Silene alba, 98
 SINSKO, M. J., 204
 Slope in Indiana, 290
 SMITH, SANDRA SCHILLER, 100
 SMUCKER, JERRY D., 97
 Soil, Shallow Muck, 400
 Soils, Cincinnati, 384
 Solar Energy, 350

- Solar Hot Water Collector, 350
Sorghum, use in prairie establishment, 94
 SOUSA, LYNN R., 131
 SPENCER, D. F., 148
 Spicer Lake, 173
 SPICKA, EDWIN J., 418
 Spleen cells, rat, 103
 Spore Germination, 97
 Spring meeting—Academy of Science, 16,
 20
 SQUIERS, EDWIN R., 146
 STADLER, S. J., 320
 STEINHARDT, GARY C., 384
 STIVERS, RUSSELL K., 394
 STORHOFF, B. N., 129, 130
 Storm Drainage, 188
 Storm model, 188
 Stream Temperatures, 232
 Streams, Classification, 143
 STRUNK, KEVIN L., 273
 Succession, plant, 146
 Sulfur dioxide, 234
 Sulfur Dioxide Effects on Vegetation, 234
 SULLIVAN, DAN M., 275
 SULLIVAN, PATRICK J., 231
 SULLIVAN, T. M., 114
 SUN, I. L., 120
 Superoxide dismutase, 128
 SUSALIA, ANNE A., 91
 Swarming, 207
 SWEIGARD, JAMES A., 97
Sylvilagus floridanus, ectoparasites of, 418
 SYMBER, DIANE M., 290
 Systematics, Biological Survey, 39
- TANNER, GEORGE F., 275
 Tanning, 103
 TAYLOR, DARLENE K., 128
 Terre Haute, Air Pollution, 320
 Tetrahydropyrrolidocacnaphthenes, 136
Thomomys, 204
 Thyroid, 407
 TINKLE, WILLIAM J., 91
 TOEBES, G. H., 189
 TOMAK, CURTIS H., 84
 TORKE, B. G., 142, 180
 TORREY, DEBORAH, 145
 Trees, Distribution, 354
 Trivittatus virus, 204
 TROMLEY, N. J., 225
 TROXEL, KAREN S., 343
 Two-Pyridones, 131
- UNGER, GEORGE, 350
 USIHER, ROLAND W., 234
- VAIL, DAVID H., 207, 218
 Valparaiso University, 327
 Vascular Plants, 359
 Vasectomy, 405
 Vegetation, 147
 Vermillion County, 310
 VESELACK, MARILYN S., 92
 VETTER, R. J., 114, 407
 Virus Incomplete, 120
Volvox aureus, 149
- Wabash Valley Fault System, 275
 WALKER, MICHAEL, 130
 WALTER, VIVIAN P., 99
 WALTZ, ROBERT D., 354
 WARNES, CARL E., 340, 341
 WARREN, CHARLES P., 82
 Washington County, 147
 WASSEL, MARY E., 418
 Water Quality, 142
 Water Treatment, 255
 Water Treatment System, 231
 Water, Well, 190
 WEBSTER, DAN J., 68, 154
 Weevil, Alfalfa, 206
 WERT, WILLIAM G., 380
 WEST, TERRY R., 300
 WHITAKER, JOHN O. JR., 418
 White River, 341
 WILLARD, KEVIN, 131
 WILLIAMS, DOUGLAS B., 128
 WILLIAMS, ROBERT D., 94
 Wisconsin tills, 384
 WITMER, SAMUEL W., 353
 WONG, LARRY, 234
 WONG, T. T. Y., 225
 WOOLSEY, HENRY, 353
- YAZICIGIL, H., 189
 Yellow Bass, 154
 YEO, EMILY, 100, 101
 YODER, LARRY R., 94, 383
 YOKLEY, E. M., 136
 YONKER, JAMES W., 207
 YORK, ALAN C., 204
 YOUNG, JULIE, 94
- Zimmerman Pine Moth, 207



