

# MANUSCRIPT REVIEWERS

## VOLUME 104, NUMBERS 1-2 AND 3-4

James L. Ahlrichs	Purdue University	West Lafayette, IN
Stanley L. Burden	Taylor University	Upland, IN
Ernest E. Campaigne	Indiana University	Bloomington, IN
William R. Clark	Ball State University	Muncie, IN
Robert F. Dale	Purdue University	West Lafayette, IN
James R. Gammon	DePauw University	Greencastle, IN
Marcia L. Gillette	Indiana University Kokomo	Kokomo, IN
Walter A. Hasenmueller	Indiana Geological Survey	Bloomington, IN
Charles Heiser, Jr.	Indiana University	Bloomington, IN
A.J.C.L. Hogarth	Ross Laboratories	Columbus, OH
Michael A. Homoya	Indiana Department of Natural Resources	Indianapolis, IN
Marion T. Jackson	Indiana State University	Terre Haute, IN
Geoff Kramer	Indiana University Kokomo	Kokomo, IN
Gene Kritsky	College of Mount St. Joseph	Cincinnati, OH
N. Gary Lane	Indiana University	Bloomington, IN
Paul C. MacMillan	Hanover College	Hanover, IN
Wilton N. Melhorn	Purdue University	West Lafayette, IN
John A. Ricketts	DePauw University	Greencastle, IN
Paul E. Rothrock	Taylor University	Upland, IN
Malcolm L. Sargent	University of Illinois	Urbana, IL
Thomas P. Simon	U.S. Environmental Protection Agency	Chicago, IL
William L. Stoller	Indiana University Kokomo	Kokomo, IN
Rex M. Strange	Southern Illinois University	Carbondale, IL
Robert Waltz	Indiana Department of Natural Resources	Indianapolis, IN
J. Dan Webster	Hanover College	Hanover, IN
Harmon P. Weeks, Jr.	Purdue University	West Lafayette, IN
John O. Whitaker, Jr.	Indiana State University	Terre Haute, IN
Larry R. Yoder	Goshen College	Goshen, IN



# INDEX

## PROCEEDINGS OF THE INDIANA ACADEMY OF SCIENCE

### VOLUME 104 (1-2 AND 3-4)

- Abrell, D.B., 213  
Abuse shelters, 233  
*Acalypha deamii*, 229  
*Acer nigrum* forest at the Raven Run Nature  
Sanctuary, 173  
*Acer saccharum*  
forest at the Raven Run Nature Sanctuary, 172  
impact of white-tailed deer browsing on, 35, 38  
Acid mine drainage  
in the Patoka River watershed, 195  
in the South Fork Patoka River, 204  
*Additions to the Flora of Southern Indiana,*  
V and VI, 213  
Adelie penguin, 92  
*Aix sponsa*, 194  
Alkaline peatland, 43  
Allison, B., 35  
*Allium*  
*burdickii*, 174, 227  
*tricoccum*, 227  
Alter, C., 72  
American crow, 99  
*Aplectrum hyemale*, 174  
*Aristida purpurascens*, 217  
*Asclepias viridis*, 213  
*Asplenium*  
*resiliens*, 228  
*ruta-muraria*, 229  
Auditing Committee, report of 27 April 1995, 129  
*Aureolaria flava*, 174  
*Azolla* (cf.) *caroliniana*, 217  
  
*Bacopa rotundifolia*, 217  
Baker, J.I., 25  
Baker, P.S., 73  
Ball State University, development of chemistry  
at, 72  
*Bartonia paniculata*, 217  
Bass, white, 204  
Bat, Indiana, 194  
Battered women, 233  
*Bedrock Paleotemperature Study of the Kentland*  
*Impact Site, Kentland, Indiana*, 207  
Biagi, A., 11  
Bias in criminal investigations, 93  
Big Clifty Creek, Clifty Falls State Park, 132  
Bivalves at Bristol Fen, 44  
Black oak, 5  
Blackstripe topminnow, 253  
Blanchard, W.M., 73  
Blood electrolyte analyzer, 25  
Bluebreast darter, 200  
Brainard Shale, 210  
Breeding population of the chestnut-sided warbler  
(*Dendroica pensylvanica*), 47  
Briscoe, H.T., 75  
Bristol Fen, 43  
  
Brooker, R., 77  
Brown, H.C., 76  
Browne, E., 141  
Bruce, E.M., 75  
Bryant, C.N., 131  
Bryant, W.S., 131  
*Bubo virginianus*, 99  
Bunger, W.B., 75  
Burden, S.L., 25, 77  
Burton, M., 78  
*Buteo lineatus*, 99  
Butler University, development of chemistry at, 72  
Bryd, Admiral R.E., 87  
  
Campbell, J., 139  
*Carex*  
*eburnea*, 230  
*gigantea*, 217  
*laxiculmis*, 174  
*lupuliformis*, 217  
*plantaginea*, 174  
*woodii*, 215  
Carrier, Rev. J., 78  
Catalog of the vascular plants of the Raven Run  
Nature Sanctuary, 143  
Catalytic activities of immobilized  
polyoxometalates, 185  
*Cathartacta macormicki*, 92  
Cervone, T.H., 193  
*Chaerophyllum procumbens*, 228  
Chamberlain, D.R., 99  
*Charles Darwin's Hoosier Correspondent*, 81  
Charlestown State Park, plants of the, 223  
Chemistry  
Departments, their ranking in Indiana  
universities, 67  
early history and development in Indiana, 67  
influence of the Indiana Academy of Science  
on its development in Indiana, 69  
Chert barrens, 5  
Chestnut oak, 137  
Chestnut-sided warbler, 47  
preferred habitat of, 52  
*Chimaphila maculata*, 175  
Chinquapin oak, 137  
Chloride ion concentrations in blood serum, 25  
*Chloris verticillata*, 215, 227  
*Cimicifuga rubifolia*, 217  
Clapp, A.C., 3  
Clark County  
first record of the mosquitofish in, 252  
new plant records for, 223  
*Claytonia virginica*, impact of white-tailed deer  
browsing on, 35, 39  
Clem, P.D., 249

- Clifty Canyon Nature Preserve  
mixed mesophytic forest at, 131, 135  
most important species at, 133  
species diversity at, 134, 137  
subcanopy species at, 133  
Clifty Falls State Park, 131  
Coal mining, its effect on the Patoka River  
drainage, 193  
Code of Ethics, 127  
Coefficient of determination, 133  
*Collinsia verna*, 173  
Colorimetric analysis for CN detection, 242, 244  
*Connective Tissue of the Locust Rectum: An Ultrastructural Study*, 57  
Co-occurring species with *Silene regia*  
(royal catchfly), 6  
Cook, D.J., 74  
Cope, A.C., 73  
Copperbelly water snake, 194  
Cordell, T.B., 35  
*Corvus brachyrhynchos*, 99  
Coulter, J., 3  
Council, Minutes of 29 April 1994, 113  
Crayfish, Indiana, 103  
*Crotonopsis elliptica*, 218  
Crow, American, 99  
Cyanide in soils and wastes, 241
- Darter, bluebreast, 200  
Darwin, Charles, 81  
*Datura*  
    *metel*, 227  
    *meteloides*, 227  
    *wrightii*, 227  
Daviess County, first record of the mosquitofish  
in, 252  
Davis, R., 132  
Day, H.G., 67  
Deer foraging, 35  
Deer Study Resolution, 118  
*Dendroica pensylvanica*, 47  
Dennis, D.W., 74  
DePauw University, development of chemistry  
at, 73  
Depressive explanatory style, 235  
Desert locust (*Schistocerca gregaria*), connective  
tissue in the rectum of, 58  
*Determination of Cyanide in Soils and Wastes by Ion Chromatography*, 241  
Deters, J.F., 78  
*Dicentra*, impact of white-tailed deer browsing  
on, 40  
*Didiplis diandra*, 218  
*Digitaria ciliaris*, 227  
*Diodia virginiana*, 214  
Distinguished Scholar Award, 117, 121  
*Distribution and Status of the Indiana Crayfish, Orconectes indianensis, with Comments on the Crayfishes of Indiana*, 103  
Distribution of oak species in Indiana, 11  
*Distribution of the Mosquitofish, Gambusia affinis (Baird & Girard), in Indiana, with Comments on Resource Competition*, 249  
*Do Unique Facial Features Bias Photo Array Identifications?*, 93  
Dolan, R.W., 1
- Domestic violence, 236  
*Drepanocladus* at Bristol Fen, 44  
*Dryopteris cristata*, 218  
Dubois County, first record of the mosquitofish  
in, 252  
Duck, wood, 194
- Earlham College, development of chemistry at, 74  
*Early History and Development of Chemistry at Older Indiana Colleges and Universities*, 67  
EasyLyte Plus blood electrolyte analyzer, 26  
Education in 19th Century Indiana, 70  
Electrocatalysis, 185  
Electrocatalytic reduction, 190  
Electrodes for electrocatalysis, 185  
Electrolytes, flow-through, ion-selective, 25  
Emmert, G.A., 223  
Endangered plant species, 228  
EPA Method 9010 for cyanide determination,  
241, 244  
Equitability (evenness), 133  
*Erigenia bulbosa*, impact of white-tailed deer  
browsing on, 40  
*Etheostoma camurum*, 200  
*Euonymus fortunei*, 182  
*Eupatorium*  
    *album*, 214  
    *hyssopifolium*, 218  
    *rotundifolium*, 218  
Evans, G.H., 77  
Executive Committee Minutes  
    2 July 1994, 118  
    23 September 1994, 124  
Exotic species at Raven Run Nature Sanctuary, 181  
*Exploration History of the Lindsey Islands, Antarctica, 1928-1994*, 85  
*Extra-Limital Breeding Populations of the Chestnut-Sided Warbler (Dendroica pensylvanica) in South-Central Indiana*, 47  
Extraneous oak species in Indiana, 19  
Eyeglasses, their influence on selecting potential  
criminals from lineups, 94  
Eyewitness identifications  
    effect of facial hair on, 96  
    influence of eyeglasses on, 94
- Facial hair, its influence on selecting potential  
criminals from lineups, 96  
Family violence, 233  
Fayette County, Kentucky, vascular plant records  
for, 139  
Ferguson, C.E., 81  
*Festuca paradoxa*, 218  
Financial report for 1994, 129  
Fishes of the Patoka River Basin, 193  
    before 1900, 200  
    between 1940 and 1945, 200  
    between 1945 and 1978, 203  
    between 1978 and 1994, 204  
*Flora and Vegetation of Raven Run Nature Sanctuary, Fayette County, Kentucky*, 139  
Flory, P.J., 76  
Floyd County, new plant records for, 223  
Forest structure and composition in the  
Clifty Canyon Nature Preserve, 131

- Forest Vegetation of the Clifty Canyon Nature Preserve at Clifty Falls State Park, Jefferson County, Indiana*, 131  
 Fort Atkinson Limestone, 209  
*Fundulus notatus*, 253  
 Galena Dolomite, 210  
*Gambusia affinis*, 249  
 ability to control mosquitoes, 253  
 compared with *Fundulus notatus*, 253  
 distribution, 252  
 food preferences, 253  
 Gastropods at Bristol Fen, 44  
*Gentiana villosa*, 218  
*Genus Quercus (Fagaceae) in Indiana: Phytogeography and a Key to the Species*, 11  
 Gibson, K.D., 47  
 Gierke, T.L., 241  
*Goodyera pubescens*, 175  
 Grassy vegetation on rocky riverbanks at Raven Run Nature Sanctuary, 168  
 Great horned owl, 99  
 Greene County, first record of the mosquitofish from, 252  
 Gremel, S., 47  
 Guthrie, N., 74  
 Hanover College, development of chemistry at, 74  
 Harmonie Group, 71  
 Harrison County, new plant records for, 223  
 Hawk, red-shouldered, 99  
*Hedera helix*, 182  
 Hedge, C.L., 213  
 Hedge, R.L., 213  
*Helianthemum bicknellii*, 218  
*Heliotropium tenellum*, 229  
*Heteromeyenia* at Bristol Fen, 44  
*Hexalectris spicata*, 230  
*Hieraceum*  
 . . . *caespitosum*, 218  
 . . . *longipilum*, 216  
*Historical and Present Distribution of Fishes in the Patoka River Basin: Pike, Gibson, and Dubois Counties, Indiana*, 193  
 History and development of chemistry at Indiana colleges and universities, 67  
 Hoffman Falls, Clifty Falls State Park, 132  
 Holl, C.W., 76  
 Homoya, M.A., 213  
 Hoosier National Forest, chestnut-sided warbler (*Dendroica pensylvanica*) in the, 47  
 Hovey, E.O., 78  
 Howe, H.E., 74  
 Howe, R.C., 207  
 Hurty, J.N., 69  
 Huston, H.A., 69  
*Hypericum adpressum*, 216  
 Illinois, chestnut-sided warbler (*Dendroica pensylvanica*) in, 53  
*Impact of White-Tailed Deer on Plant Cover and Biomass in Potato Creek State Park, St. Joseph County, Indiana*, 35  
 Indiana Army Ammunition Plant, plants of the, 223  
 Indiana bat, 194  
 Indiana crayfish, 103  
 habitat of the, 109  
 Indiana State University, development of chemistry at, 75  
 Indiana University, development of chemistry at, 75  
 Inner Bluegrass Region of Kentucky, vegetation of the, 139  
 Intraneous oak species in Indiana, 19  
 Ion chromatography, its role in identifying cyanide in soils and wastes, 241, 244  
*Iresine rhizomatosa*, 229  
 Jarial, M.S., 57  
 Jensen, R.J., 11  
*Juglans-Celtis-Fraxinus* forest at Raven Run Nature Sanctuary, 170  
*Juglans cinerea*, 175  
 Julian, P.L., 73, 74  
*Juncus secundus*, 219  
*Juniperus* forest at Raven Run Nature Sanctuary, 168, 169  
 Kasem, K.K., 185  
 Kentland impact site, 207  
 Key to the oaks of Indiana, 21  
 Kintner, E., 76  
 Kritsky, G., 81  
 Lake County, first record of the mosquitofish from, 252  
 Larson, R.G., 78  
 Learned helplessness, 235  
*Leavenworthia uniflora*, 228  
 Leopard seals, 92  
*Leptochloa panicoides*, 219  
*Lilium michiganense*, 175  
 Lindsey, A.A., 85  
 Lindsey Islands, 85  
*Linum*  
 . . . *striatum*, 219  
 . . . *sulcatum*, 230  
 Little Clifty Creek, Clifty Falls State Park, 132, 136  
 Locust, desert, 58  
*Lonicera*  
 . . . *japonica*, 182  
 . . . *maackii*, 181, 227  
 . . . *sempervirens*, 214  
*Ludwigia glandulosa*, 219  
*Lycopodium*  
 . . . *clavatum*, 219  
 . . . *obscurum*, 216  
*Lygodium palmatum*, 214  
 Lyons, R.E., 75  
*Lysimachia vulgaris*, 216  
 Maclare, W., 71  
 MacMillan, P.C., 131  
*Malvastrum hispidum*, 175  
 Manchester College, development of chemistry at, 76  
 Maquoketa Shale, 209, 210  
*Matelea obliqua*, 230

- Mature forest  
on dry (subxeric) sites at Raven Run Nature Sanctuary, 171  
on moist (mesic) sites at Raven Run Nature Sanctuary, 171
- Maxwell, R.H., 223
- McCoy, H.N., 76
- Meijer, W., 139
- Melica nitens*, 229
- Mellon, M.G., 76
- Memory Effects and Offset Potentials in Flow-Through, Ion-Selective Electrodes*, 25
- Mertz, E.T., 76
- Meteorite impact, paleotemperature effects of, 207
- Mikania scandens*, 219
- Miller, E.G., 76
- Milligan, R., 72
- Mirounga leonina*, 92
- Modified Electrodes for Electrocatalysis*, 185
- Monotropa uniflora*, 175
- Moore, R.B., 72
- Morales, N.E., 193
- Morone chrysops*, 204
- Mosquitofish, 249  
ability to control mosquitoes, 253  
compared to the blackstripe topminnow, 253  
distribution, 252  
food preferences, 253
- Mottesi, G.B., 103
- Muhlenbergia capillaris*, 219
- Myotis sodalis*, 194
- Najas* at Bristol Fen, 44
- Nasser, M.N., III, 207
- Nerodia erythrogaster neglecta*, 194
- Nests of the red-shouldered hawk, 101
- New Harmony, 71
- Nieuwland, Rev. J.A., 78
- Notropis texanus*, 204
- Noyes, W.A., Jr., 77
- Noyes, W.A., Sr., 69, 77
- Nuphar* at Bristol Fen, 44
- Oak  
distribution in Indiana, 11  
hybrids reported from Indiana, 17  
species native to Indiana, 16
- Odocoileus virginianus* (white-tailed deer), grazing impact of, 35
- Offset potentials in electrodes, 25
- Ohio, chestnut-sided warbler (*Dendroica pensylvanica*) in, 49
- Oil well waste in the Patoka River watershed, 195
- Old field vegetation at Raven Run Nature Sanctuary, 166, 180
- Onosmodium hispidissimum*, 175
- Ophioglossum engelmannii*, 230
- Orconectes*  
*indianensis*, 103  
*putnami*, 104, 110  
*virilis*, 109
- Osborne, R.E., 233
- Owen, Richard, 72
- Owen, Robert, 69, 71
- Owen County, first record of the mosquitofish from, 252
- Owenites, 71
- Owl, great horned, 99
- Pachysandra procumbens*, 176
- Paddlefish, 204
- Page, L.M., 103
- Page charges, 114, 123, 126
- Paleoecology of an Alkaline Peatland in Elkhart County, Indiana*, 43
- Palisades Region of Kentucky, vegetation of the, 139
- Panax quinquefolium*, 176
- Panicum*  
*anceps*, 176  
*annulum*, 214  
*verrucosum*, 216  
*villosum*, 216
- Paspalum floridanum*, 214
- Passiflora incarnata*, 230
- Patoka River Basin, fishes of the, 193
- Patoka River National Wildlife Refuge, 194
- Patterson, A.M., 77
- Peat in Elkhart County, 43
- Penguin, 91  
Adelie, 92
- Picea*  
*glauca* at Bristol Fen, 44  
*mariana* at Bristol Fen, 44
- Pichtel, J., 241
- Plant species  
common at the Swamp Rose site in Potato Creek State Park, 39  
in the proposed State Park areas of the Indiana Army Ammunition Plant, 223  
new to Indiana, 213, 227  
new to southern Indiana, 215, 224  
rare species in southern Indiana, 213  
rarely observed in southern Indiana, 217
- Platteville Dolomite, 210
- Plunkett, R.J., 76
- Poa angustifolia*, 181
- Polyoxometalate ions in electrocatalysis, 185
- Polypodium polypodioides*, 230
- Portable blood electrolyte analyzer, 27
- Post oak, 5
- Potamogeton pusillus*, 216
- Potassium ion concentration in blood serum, 25
- Potato Creek State Park, white-tailed deer in, 35
- Prenanthes crepidinea*, 176
- Procambarus*  
*clarkii*, 111  
*gracilis*, 111
- Prunus virginiana*, 176
- Puccinellia pallida*, 216
- Purdue University, development of chemistry at, 76
- Quercus*, 11  
*alba* x *Q. muehlenbergii*, 20  
*coccinea*, 13, 17  
*coccinea* x *Q. rubra*, 20  
*ellipsoidalis*, 13, 16  
*exacta*, 20  
*imbricaria*, 17  
*muehlenbergii*, 13, 16, 19, 137  
*pagoda*, 13  
*prinoides*, 13

- Quercus* (continued)  
*prinus*, 137  
*rubra*, 137  
*shumardii*, 16  
*stellata*, 5  
*velutina*, 5, 17  
*x deamii*, 20  
*x leana*, 15, 18, 20  
*x runcinata*, 15, 20  
*x schuettei*, 12
- Quercus-Fraxinus-Acer saccharum* mixed forest at Raven Run Nature Sanctuary, 171
- Quercus-Fraxinus-Juniperus* forest at Raven Run Nature Sanctuary, 171
- Ranunculus sardous*, 214
- Rappites, 71
- Rare plant species, 230  
 in Raven Run Nature Sanctuary, 174  
 in southern Indiana, 213
- Raven Run Nature Sanctuary, 139  
*Acer nigrum* forest, 173  
*Acer saccharum* forest, 172  
 exotic species, 181  
 grassy vegetation on rocky riverbanks, 168  
*Juglans-Celtis-Fraxinus* forest, 170  
*Juniperus* forest, 168, 169  
 mature forest on dry (subxeric) sites, 171  
 mature forest on moist (mesic) sites, 171  
 old field succession, 180  
 old field vegetation, 166  
*Quercus-Fraxinus-Acer saccharum* mixed forest, 171
- Quercus-Fraxinus-Juniperus* forest, 171
- Robinia-Prunus* forest, 170  
 streamside forest, 173  
 successional forest on dry or eroded sites, 168  
 successional forest on moist sites with gentle slopes, 170
- Rectum, connective tissue in the desert locust, 57
- Red oak, 137
- Red-Shouldered Hawk Territories in Southeastern Indiana*, 99
- Rhexia mariana* var. *marianna*, 219
- Rhynchospora corniculata*, 220
- Riemenschneider, V., 35
- Riparian vegetation at Raven Run Nature Sanctuary, 173
- Robinia-Prunus* forest at Raven Run Nature Sanctuary, 170
- Rose-Hulman Institute of Technology, development of chemistry at, 77
- Royal Catchfly* (*Silene regia*; *Caryophyllaceae*) in Indiana, 1
- Ruch, D.G., 139
- Sagittaria graminea*, 220
- Salamonie Dolomite, 209, 210
- Satureja vulgaris* var. *neogaea*, 220
- Scheidler, D.A., 241
- Schistocerca gregaria*, connective tissue in the rectum of, 57
- Scholar Award, Distinguished, 117, 121
- Schultz, F.A., 185
- Schwann, T.C., 78
- Scleria triglomerata*, 220
- Scott County, new plant records for, 223
- Scutellaria parvula* var. *australis*, 230
- Seal  
 leopard, 92  
 southern elephant, 92
- Sedum*  
*pulchellum*, 214  
*telephioides*, 229
- Seifert, R.L., 77
- Self-esteem, 233
- Self-handicapping, 234
- Senna*  
*obtusifolia*, 215  
*occidentalis*, 220
- Service Award, Outstanding, 117, 120
- Setaria geniculata*, 227
- Sexton Creek Limestone, 209, 210
- Shakopee Dolomite, 209
- Shannon-Wiener function, 132
- Shiner, weed, 204
- Shriner, R.L., 75
- Sida hermaphrodita*, 217
- Silene regia*, 1
- Similarity coefficient, 133
- Simon, T.P., 193
- Simpson, M., 73
- Skua, south polar, 92
- Smith Cemetery, site of the largest *Silene regia* (royal catchfly) population in Indiana, 5
- Sobiech, S.A., 193
- Social judgments related to eyeglasses, 95
- Sodium ion concentration in blood serum, 25
- Soils, cyanide in, 241
- Solidago*  
*harrisii*, 177  
*rupestris*, 168, 177
- South polar skua, 92
- Southern elephant seals, 92
- Southern Indiana Plant Distribution Records and Notes on the Endangered, Threatened, and Rare Vascular Plant Species in the Proposed State Park Areas of the Indiana Army Ammunition Plant*, 223
- Spencer County, first records of the mosquitofish from, 252
- Spiranthes*  
*magnicamporum*, 228  
*ovalis*, 177
- Stanley, W.M., 70
- Strickler, A., 77
- Strong, L.E., 74
- Strophostyles leiosperma*, 220
- Styrax grandifolius*, 215
- Successional forest  
 on dry or eroded sites at Raven Run Nature Sanctuary, 168  
 on moist sites with gentle slopes at Raven Run Nature Sanctuary, 170
- Sullivan County, first record of the mosquitofish from, 252
- Sullivantii sullivantii*, 230
- Swinehart, A.L., 43
- Synandra hispidula*, 177
- Taylor University, development of chemistry at, 77

- Terry, R.L., 93  
Threatened plant species, 229  
Thursday Morning Hiking Group, 141  
Thwaites Ice Tongue, 89  
*Tipularia discolor*, 177  
Topminnow, blackstripe, 253  
*Trillium recurvatum*, 166  
Tunnel Falls, Clifty Falls State Park, 132  
Typhoid bacteria in the Indianapolis water supply, 83  
  
University of Evansville, development of chemistry at, 77  
University of Indianapolis, development of chemistry at, 77  
University of Notre Dame, development of chemistry at, 78  
*Utricularia vulgaris*, 220  
*Uvularia*  
    *grandiflora*, 215  
    *perfoliata*, 215  
  
*Valerianella radiata*, 228  
Valparaiso University, development of chemistry at, 78  
Van Nüys, T.C., 75  
Vascular plants of the Raven Run Nature Sanctuary, 143  
*Viburnum*  
    *molle*, 177  
    *raffinesquianum*, 217  
Vigo County, first record of the mosquitofish from, 252  
*Viola*, impact of white-tailed deer browsing on, 40  
*Vitis rupestris*, 215  
  
Wabash College, development of chemistry at, 78  
Warbler, chestnut-sided, 47  
Warder, R.B., 69  
Washington County, new plant records for, 223  
Wastes, cyanide in, 241  
Water quality of the Patoka River watershed, 195  
Water snake, copperbelly, 194  
Webster, J.D., 99  
Weed shiner, 204  
Weimer, H.R., 76  
Weller, L.E., 77  
Wharton, M., 141  
Whistler, R.L., 76  
Whitaker, J.O., Jr., 249  
White, H.K., 74  
White bass, 204  
Whitehead, D.R., 47  
White-tailed deer, grazing impact of, 35, 218  
Wiley, H.W., 69, 74, 76  
Wilkins, Sir H., 86  
Wilkinson, P.D., 75  
Wood duck, 194  
*Woodwardia areolata*, 220  
Workingmen's Institute and Library, 72  
Wylie, T.A., 75  
  
*You Are What You Think: The Perpetuating Nature of Self-Esteem*, 233  
Young, A., 74  
Young, J.P., 72  
  
*Zosterella dubia*, 220

**SOIL AND ATMOSPHERIC SCIENCES**

J. Pichtel, T.L. Gierke, and D.A. Scheidler.

- DETERMINATION OF CYANIDE IN SOILS AND  
WASTES BY ION CHROMATOGRAPHY ..... 241

**ZOOLOGY**

- P.D. Clem and J.O. Whitaker, Jr. DISTRIBUTION OF THE  
MOSQUITOFISH, *GAMBUSIA AFFINIS* (BAIRD &  
GIRARD), IN INDIANA, WITH COMMENTS ON  
RESOURCE COMPETITION ..... 249

- MANUSCRIPT REVIEWERS ..... 259

- INDEX ..... 261



Printed on Recycled Paper

# PROCEEDINGS OF THE INDIANA ACADEMY OF SCIENCE

Volume 104, No. 3-4 (1995)

## CONTENTS

### BOTANY

- C.N. Bryant, W.S. Bryant, and P.C. MacMillan.  
FOREST VEGETATION OF THE CLIFTY CANYON  
NATURE PRESERVE AT CLIFTY FALLS STATE  
PARK, JEFFERSON COUNTY, INDIANA ..... 131

- J. Campbell, D.G. Ruch, and W. Meijer. THE FLORA AND  
VEGETATION OF RAVEN RUN NATURE SANCTUARY,  
FAYETTE COUNTY, KENTUCKY ..... 139

### CHEMISTRY

- K.K. Kasem and F.A. Schultz. MODIFIED ELECTRODES FOR  
ELECTROCATALYSIS ..... 185

### ECOLOGY

- T.P. Simon, S.A. Sobiech, T.H. Cervone, and N.E. Morales.  
HISTORICAL AND PRESENT DISTRIBUTION OF FISHES  
IN THE PATOKA RIVER BASIN: PIKE, GIBSON, AND  
DUBOIS COUNTIES, INDIANA ..... 193

### GEOLOGY AND GEOGRAPHY

- M.N. Nasser III and R.C. Howe. BEDROCK  
PALEOTEMPERATURE STUDY OF THE KENTLAND  
IMPACT SITE, KENTLAND, INDIANA ..... 207

### PLANT TAXONOMY

- M.A. Homoya, D.B. Abrell, C.L. Hedge, and R.L. Hedge.  
ADDITIONS TO THE FLORA OF  
SOUTHERN INDIANA, V AND VI ..... 213

- R.H. Maxwell and G.A. Emmert. SOUTHERN INDIANA PLANT  
DISTRIBUTION RECORDS AND NOTES ON THE  
ENDANGERED, THREATENED, AND RARE  
VASCULAR PLANT SPECIES IN THE PROPOSED  
STATE PARK AREAS OF THE INDIANA ARMY  
AMMUNITION PLANT ..... 223

### PSYCHOLOGY

- R.E. Osborne. YOU ARE WHAT YOU THINK: THE  
PERPETUATING NATURE OF SELF-ESTEEM ..... 233