

## INDEX TO VOLUME LIV, 1979

- Abstracts Presented at the Annual Meeting ..... 63
- Abstracts Presented at the Spring Collegiate Meetings ..... 63
- Antitumor Agents Constituents of an East Tennessee Population of *Helenium Amarum* (RAF). H. Rock, T. G. Waddell, M. B. Ridley, K. D. Evans and M. E. Green ..... 103
- Anura (Amphibia) of Rio Upano Valley of Eastern Ecuador. C. M. Fugler and A. B. Walls ..... 149
- Aristolochiales, Magnoliales, Nymphaeales, Papaverales, Ranunculales, Atlas of the Vascular Plants of Tennessee II. Magnoliidae: B. E. Wofford and A. M. Evans ..... 75
- Atlas of the Vascular Plants of Tennessee I. Pteridophytes and Gymnosperms. B. E. Wofford and A. M. Evans ..... 32
- Atlas of the Vascular Plants of Tennessee II. Magnoliidae: Aristolochiales, Magnoliales, Nymphaeales, Papaverales, Ranunculales. B. E. Wofford and A. M. Evans ..... 75
- Aqua Biological Station, Tech. R. E. Martin ..... 42
- Autian, J. and W. H. Lawrence. Toxicology of Thermodegradation and Combustion Products of Man-Made Materials ..... 45
- Bahner, C. T. Spectrophotometric Determination of Nitrite in Human Saliva ..... 32
- Beech L., H. Franks, J. P. Daugherty, A. Dean, J. Dees, R. Dees, P. Halmeson, and P. Mauldin. Metabolism of Butylated Hydroxyfoluene in Mice, Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup>C Butylated Hydroxytoluene ..... 95
- Bergenback, R. E., R. Ketelle, and R. Wilson. Stratigraphic Framework and Depositional Environments, Lower Pennsylvanian Rocks, Dorian Cove Area ..... 81
- Bergenback, R. E. and E. Robbs. Sedimentation of Cross-bedded Megaripple Trough-fill Near Sewanee and Signal Mountain, Tennessee ..... 1
- Bergenback, R. E. and W. Williams. Subsurface Distribution of Pennsylvanian Gizzard Group Northwestern Marion County, Tennessee ..... 98
- Biochemical Detoxification Mechanisms in Herbivores. L. B. Blatisten ..... 52
- Biographical Data in Serial Publications of the Tennessee Academy of Science. J. X. Corgan and S. R. Tanner ..... 5
- Bird, J. C., R. A. Minear and D. E. Johnson. Trihalomethanes in Drinking Water ..... 49
- Black Gum—Exclusive Host of Mistletoe in Lawrence County, Tennessee. T. E. Hemmerly, A. A. Forsythe and M. L. Womack ..... 89
- Blatisten, L. B. Biochemical Detoxification Mechanisms in Herbivores ..... 52
- Bluegills in Three Central Tennessee Lakes, Time of Annulus Formation of. F. J. Bulow and J. F. Heitman ..... 116
- Bulow, F. J. and J. F. Heitman. Time of Annulus Formation of Bluegills in Three Central Tennessee Lakes ..... 116
- Butylated Hydroxyfoluene in Mice, Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup>C Butylated Hydroxytoluene, Metabolism of. H. Franks, J. P. Daugherty, L. Beech, A. Dean, J. Dees, R. Dees, P. Halmeson and P. Mauldin ..... 95
- (Caddisflies) of Tennessee, An Annotated List of Trichoptera. D. T. Etnier and G. A. Schuster ..... 15
- Caplenor, D Woody Plants of the Gorges of the Cumberland Plateau and Adjacent Highland Rim ..... 139
- Caponetti, J. D. Environmental Toxins: Highlights of the 1978 theme ..... 43
- Chappell, C., C. Grigg and M. Wells. An Immunological Comparison of Thrombocytes From Bursectomized and Intact Chickens ..... 122
- Corgan, J. X. and S. R. Tanner. Biographical Data in Serial Publications of the Tennessee Academy of Science ..... 5
- Correlations of Host Specificity With Host in Helminths Parasitizing the Plethodontids of Washington County, Tennessee ..... 106
- Daugherty, J. P., Beeman, D. K. and Pelton, M. R. Analysis of the Electrophoretic Pattern of Nonspecific Esterases of Black Bear Serum ..... 128
- Daugherty, J. P., H. Franks, L. Beech, A. Dean, J. Dees, P. Halmeson and P. Mauldin. Metabolism of Butylated Hydroxyfoluene in Mice, Radioactivity Associated With Blood and Expired Carbon Dioxide After Administration of <sup>14</sup>C Butylated Hydroxytoluene ..... 95
- Dean, A., H. Franks, J. P. Daugherty, L. Beech, J. Dees, R. Dees, P. Halmeson and P. Mauldin. Metabolism of Butylated Hydroxyfoluene in Mice, Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup>C Butylated Hydroxytoluene ..... 95
- Dees, J., H. Franks, J. P. Daugherty, L. Beech, A. Dean, R. Dees, P. Halmeson and P. Mauldin. Metabolism of Butylated Hydroxyfoluene in Mice, Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup>C Hydroxytoluene ..... 95
- Dees, R., H. Franks, J. P. Daugherty, L. Beech, A. Dean, J. Dees, P. Halmeson and P. Mauldin. Metabolism of Butylated Hydroxyfoluene in Mice, Radioactivity Associated With Blood and Expired Carbon Dioxide After Administration of <sup>14</sup>C Butylated Hydroxytoluene ..... 95
- Detoxification Mechanisms in Herbivores, Biochemical. L. B. Blatisten ..... 52
- Dimmick, R. W. and D. White. The Distribution of Ruffed Grouse in Tennessee ..... 114
- Distinguished Tennessee Scientist, Francis G. Slack—, J. H. Hamilton, R. T. Lagemann and E. A. Jones ..... 91
- Distribution of Ruffed Grouse in Tennessee, The. D. White and R. W. Dimmick ..... 114
- Dorian Cove Area, Stratigraphic Framework and Depositional Environments, Lower Pennsylvanian Rocks. R. Ketelle, R. Wilson and R. E. Bergenback ..... 81
- Drinking Water, Trihalomethanes in. R. A. Minear, J. C. Bird and D. E. Johnson ..... 49
- Dunbar, F. R. and J. D. Moore. Correlations of Host Specificity With Host Habitat in Helminths Parasitizing the Plethodontids of Washington County, Tennessee ..... 106
- Ecotoxicology and the Toxic Substances Control Act. W. G. Rosen ..... 54
- Ecuador, The Lizards of the Upano Valley of Southeastern. C. M. Fugler and A. B. Walls ..... 120
- Effects of Stripmining on Fish and Diatoms in Streams of the New River Drainage Basin ..... 110
- Elmore, J. L. and Bunting, D. L. Long-term Changes in 200 Plankton Species Composition and Selected Physicochemical Parameters in Woods Reservoir, Tennessee ..... 132
- Environmental Toxins: Highlights of the 1978 Theme: J. D. Caponetti ..... 43
- Etnier, D. T., and G. Z. Schuster. An Annotated List of Trichoptera (Caddisflies) of Tennessee ..... 15
- Evans, A. M. and B. E. Wofford. Atlas of the Vascular Plants of Tennessee I. Pteridophytes and Gymnosperms ..... 32
- Evans, A. M. and B. E. Wofford. Atlas of the Vascular Plants of Tennessee II. Magnoliidae: Aristolochiales, Magnoliales, Nymphaeales, Papaverales, Ranunculales ..... 75
- Evans, D. D., T. G. Waddell, M. B. Ridley, and M. E. Green. Antitumor Agents Constituents of an East Tennessee Population of *Helenium Amarum* (RAF). H. Rock ..... 103
- Farmer, R. E. Jr. Seed Propagation of the Roan Mountain Bluet ..... 126
- Field Station, E. J. Meeman Biological. N. A. Miller ..... 42
- Field Stations of Tennessee, A Report of the Biological. W. L. Smith ..... 42
- Forest Microclimate in The Great Smoky Mountains. D. J. Hicks ..... 84
- Forsythe, A. A., T. E. Hemmerly and M. L. Womack. Black Gum—Exclusive Host of Mistletoe in Lawrence County, Tennessee ..... 89
- Franks, H., J. P. Daugherty, L. Beech, A. Dean, J. Dees, R. Dees, P. Halmeson and P. Mauldin. Metabolism of Butylated Hydroxyfoluene in Mice, Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup>C Butylated Hydroxytoluene ..... 95
- Fugler, C. M. and A. B. Walls. The Anura (Amphibia) of



Rio Upano Valley of Eastern Ecuador	149
Fugler, C. M. and A. B. Walls. The Lizards of The Upano Valley of Southeastern Ecuador	120
Gizzard Group Northwestern Marion County, Tennessee, Subsurface Distribution of Pennsylvanian. W. Williams and R. E. Bergenback	98
Green, M. E., T. G. Waddell, M. B. Ridley, K. D. Evans. Antitumor Agents Constituents of an East Tennessee Population of <i>Helenium Amarum</i> (RAF). H. Rock	103
Grigg, C., C. Chappell and M. Wells. An Immunological Comparison of Thrombocytes From Bursectomized and Intact Chickens	122
Grouse In Tennessee, The Distribution of Ruffed. D. White and R. W. Dimmick	114
Gymnosperms, Atlas of the Vascular Plants of Tennessee I. Pteridophytes and B. E. Wofford and A. M. Evans	32
Halmeson, P., H. Franks, J. P. Daugherty, L. Beech, A. Dean, J. Dees, R. Dees, and P. Mauldin. Metabolism of Butylated Hydroxytoluene in Mice, Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup> C Butylated Hydroxytoluene	95
Hamilton, J. H., R. T. Lagemann and E. A. Jones. Francis G. Slack—Distinguished Tennessee Scientist	91
Harvey, J. M., M. L. Kennedy, M. C. Wooten. Thompson's Pigmy Shrew, <i>Microsorex Thompsoni Winnemana</i> , in Tennessee	14
Heavy Metals: Routes of Exposure and Consequences. H. A. Moses	46
Heitman, J. F. and F. J. Bulow. Time of Annulus Formation of Bluegills in Three Central Tennessee Lakes	116
<i>Helenium Amarum</i> (RAF). H. Rock, Population of T. G. Waddell, M. B. Ridley, K. D. Evans and M. E. Green	103
Helminths Parasitizing The Plethodontids of Washington County, Tennessee, Correlations of Host Specificity With Host Habitat. J. R. Dunbar and J. D. Moore	106
Hemmerly, T. E., A. A. Forsythe, and M. L. Womack. Black Gum—Exclusive Host of Mistletoe in Lawrence County, Tennessee	89
Hicks, D. J. Forest Microclimate in The Great Smoky Mountains	84
Host Specificity With Host Habitat in Helminths Parasitizing The Plethodontids of Washington County, Tennessee, Correlations of J. R. Dunbar and J. D. Moore	106
Host Specificity of Mistletoe in Middle Tennessee IV: Bedford County. P. F. Brown and T. E. Hemmerly	118
Index to Volume LIV, 1979	
Index to Geological Mapping Associated with Theses and Dissertations at the University of Tennessee, Knoxville (Through 1975). M. L. Jones	23
Indirect Ordination of Forest Stands of the Northwest Highland Rim. R. J. Jensen	10
Immunological Comparison of Thrombocytes From Bursectomized and Intact Chickens, An. C. Grigg, C. Chappell and M. Wells	122
Jensen, F. J. Indirect Ordination of Forest Stands of the Northwest Highland Rim	10
Johnson, D. E., R. A. Minear, J. C. Bird. Trihalomethanes in Drinking Water	49
Jones, M. L. An Index to Geological Mapping Associated with Theses and Dissertations at the University of Tennessee, Knoxville (Through 1975)	23
Kennedy, M. L., M. C. Wooten and M. J. Harvey. Thompson's Pigmy Shrew, <i>Microsorex Thompsoni Winnemana</i> , in Tennessee	14
Kerley, L. M. A Sufficiency Condition for Pointwise Convergence	29
Ketelle, R., R. Wilson and R. E. Bergenback. Stratigraphic Framework and Depositional Environments, Lower Pennsylvanian Rocks, Dorian Cove Area	81
Lagemann, R. T., F. H. Hamilton and E. A. Jones. Francis G. Slack—Distinguished Tennessee Scientist	91
Lawrence, W. H., and J. Autian. Toxicology of Thermodegradation and Combustion Products of Man-Made Materials	45
Linnabary, R. D. Plants Toxic to Man and Animals	43
Lizards of The Upano Valley of Southeastern Ecuador, The. C. M. Fugler and A. B. Walls	120
Magnoliidae: Aristolochiales, Magnoliales, Nymphaeales, Papaverales, Ranunculales, Atlas of the Vascular Plants of Tennessee II. B. E. Wofford and A. M. Evans	75
Martin, R. E. Tech Aqua Biological Station	42
Mauldin, P., H. Franks, J. P. Daugherty, L. Beech, A. Dean, J. Dees, R. Dees, P. Halmeson. Metabolism of Butylated Hydroxytoluene in Mice, Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup> C Butylated Hydroxytoluene	95
Meeman Biological Field Station., E. J. N. A. Miller	42
Metabolism of Butylated Hydroxytoluene in Mice, Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup> C Butylated Hydroxytoluene. H. Franks, J. P. Daugherty, L. Beech, A. Dean, J. Dees, R. Dees, P. Halmeson and P. Mauldin	95
Metals: Routes of Exposure and Consequences, Heavy. H. A. Moses	46
Mice, Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup> C Butylated Hydroxytoluene, Metabolism of Butylated Hydroxytoluene in. H. Franks, J. P. Daugherty, L. Beech, A. Dean, H. Dees, R. Dees, P. Halmeson and P. Mauldin	95
Mickens, R. E. Properties of Scattering Amplitudes Whose Partial Waves Decrease Exponentially	38
<i>Microsorex Thompsoni Winnemana</i> , in Tennessee, Thompson's Pigmy Shrew. M. L. Kennedy, M. C. Wooten and M. J. Harvey	14
Miller, N. A. E. J. Meeman Biological Field Station	42
Minear, R. A., J. C. Bird and E. E. Johnson. Trihalomethanes in Drinking Water	49
Mistletoe in Lawrence County, Tennessee, Black Gum—Exclusive Host of. T. E. Gemmerly, A. A. Forsythe and M. Womack	89
Mistletoe in Middle Tennessee IV: Bedford County, Host Specificity of. P. F. Brown and T. E. Hemmerly	118
Moore, J. D. and J. R. Dunbar. Correlations of Host Specificity With Host Habitat in Helminths Parasitizing The Plethodontids of Washington County, Tennessee	106
Moses, H. A. Heavy Metals: Routes of Exposure and Consequences	46
Nesting Habits of Rural and Suburban House Sparrows in Northwest Tennessee. T. D. Pitts	145
New President of the Tennessee Academy of Science	41
New River Drainage Basin, Effects of Stripmining on Fish and Diatoms in Streams of The. G. L. Vaughan	110
Nitrite in Human Saliva, Spectrophotometric Determination of. C. T. Bahner	30
Nymphaeales, Papaverales, Ranunculales., Atlas of the Vascular Plants of Tennessee II. Magnoliidae: Aristolochiales, Magnoliales. B. E. Wofford and A. M. Evans	75
Oak Ridge Reservation That Are Rare, Threatened or of Special Concern, Plant Species on The Department of Energy—. P. D. Parr and F. G. Taylor, Jr.	100
Papaverales, Ranunculales., Atlas of the Vascular Plants of Tennessee II. Magnoliidae: Aristolochiales, Magnoliales, Nymphaeales. B. E. Wofford and A. M. Evans	75
Parr, P. D. and F. G. Taylor, Jr. Plant Species on The Department of Energy—Oak Ridge Reservation That Are Rare, Threatened or of Special Concern	100
Pitts, T. D. Nesting Habits of Rural and Suburban House Sparrows in Northwest Tennessee	145
Plant Species on The Department of Energy—Oak Ridge Reservation That Are Rare, Threatened or of Special Concern. P. D. Parr and F. G. Taylor, Jr.	100
Plants Toxic to Man and Animals. R. D. Linnabary	43
Plethodontids of Washington County, Tennessee, Correlations of Host Specificity with Host Habitat in Helminths Parasitizing The. J. R. Dunbar and J. D. Moore	106
Pointwise Convergence, A Sufficiency Condition for. L. K. Kerley	29
President of the Tennessee Academy of Science, New	41
Proceedings of the Tennessee Academy of Science	56
Properties of Scattering Amplitudes Whose Partial Waves Decrease Exponentially. R. E. Mickens	38
Pteridophytes and Gymnosperms, Atlas of the Vascular Plants of Tennessee. I. B. E. Wofford and A. M. Evans	32
Radioactivity Associated with Blood and Expired Carbon Dioxide After Administration of <sup>14</sup> C Butylated Hydroxytoluene, Metabolism of Butylated Hydroxytoluene in Mice. H. Franks, J. P. Daugherty, L. Beech, A. Dean, J. Dees, R. Dees, P. Halmeson and P. Mauldin	95
Report of the Biological Field Stations of Tennessee, A. W. L. Smith	42
Ridley, M. B., T. G. Waddell, K. D. Evans and M. E. Green. Antitumor Agents Constituents of an East Tennessee Population of <i>Helenium Amarum</i> (RAF). H. Rock	103
Robbs, E. and R. E. Bergenback. Sedimentation of Crossbedded Megaripple Trough-fill Near Sewanee and Signal Mountain, Tennessee	1
Rosen, W. G. Ecotoxicology and the Toxic Substances Control Act	54
Ruffed Grouse in Tennessee, The Distribution of. D. White and R. W. Dimmick	114
Saliva, Spectrophotometric Determination of Nitrite in Human. C. T. Bahner	30
Schuster, G. A. and D. T. Etnier. An Annotated List of Trichoptera (Caddisflies) of Tennessee	15
Sedimentation of Crossbedded Megaripple Trough-fill Near Sewanee and Signal Mountain, Tennessee. E. Robbs and R. E. Bergenback	1
Shah, J. J. and Shah, R. J. Identification of Some Sympathomimetic Amines by Thin Layer Chromatography (TLC)	137
Shrew, <i>Microsorex Thompsoni Winnemana</i> , in Tennessee, Thompson's Pigmy. M. L. Kennedy, M. C. Wooten, and M. J. Harvey	14
Slack—Distinguished Tennessee Scientist, Francis G. J. H. Hamilton, R. T. Lagemann and E. A. Jones	91
Smith, W. L. A Report of the Biological Field Stations of Tennessee	42
Smoky Mountains, Forest Microclimate in The Great. D. J. Hicks	84
Spectrophotometric Determination of Nitrite in Human Saliva. C. T. Bahner	30
Stratigraphic Framework and Depositional Environments, Lower Pennsylvanian Rocks, Dorian Cove Area. R. Ketelle, R. Wilson and R. E. Bergenback	84
Stripmining on Fish and Diatoms in Streams of The New River Drainage Basin, Effects of. G. L. Vaughan	110
Subsurface Distribution of Pennsylvanian Gizzard Group Northwestern Marion County, Tennessee. W. Williams and R. E. Bergenback	98
Sufficiency Condition for Pointwise Convergence, A. L. M. Derley	29
Tanner, S. R. and J. X. Corgan. Biographical Data in Serial Publications of the Tennessee Academy of Science	5
TAS News, Events and Announcements	40, 42, 81
Taylor, Jr., F. G. and P. D. Parr. Plant Species on The Department of Energy—Oak Ridge Reservation That Are Rare, Threatened or of Special Concern	100
Tech Aqua Biological Station. R. E. Martin	42
Tennessee Academy of Science, Proceedings of the	56
Thompson's Pigmy Shrew, <i>Microsorex Thompsoni Winnemana</i> , in Tennessee. D. T. Etnier and G. A. Schuster	15
Time of Annulus Formation of Bluegills in Three Central Tennessee Lakes. F. J. Bulow and J. F. Heitman	116
Toxic Substances Control Act, Ecotoxicology and the. W. G. Rosen	54
Toxic to Man and Animals, Plants. R. D. Linnabary	43
Toxicology of Thermodegradation and Combustion Products of Man-Made Materials. W. H. Lawrence and J. Autian	45
Toxins: Highlights of the 1978 Theme, Environmental. J. D. Caponetti	43
Trichoptera (Caddisflies) of Tennessee, An Annotated List of. D. T. Etnier and G. A. Schuster	15
Trihalomethanes in Drinking Water. R. A. Minear, J. C. Bird and D. E. Johnson	49
Upano Valley of Southeastern Ecuador, The Lizards of The. C. M. Fugler and A. B. Walls	12
Vascular Plants of Tennessee. I. Pteridophytes and Gymnosperms, Atlas of the. B. E. Wofford and A. M. Evans	32
Vascular Plants of Tennessee II. Magnoliidae: Aristolochiales, Magnoliales, Nymphaeales, Papaverales, Ranunculales, Atlas of the. B. E. Wofford and A. M. Evans	75
Vaughan, G. L. Effects of Stripmining on Fish and Diatoms in Streams of The New River Drainage Basin	110
Waddell, T. G., M. B. Ridley, K. D. Evans and M. E. Green. Antitumor Agents Constituents of an East Tennessee Population of <i>Helenium Amarum</i> (RAF). H. Rock	103
Walls, A. B. and C. M. Fugler. The Lizards of The Upano Valley of Southeastern Ecuador	120
Wells, M., C. Grigg, C. Chappell. An Immunological Comparison of Thrombocytes From Bursectomized and Intact Chickens	122
White, D. and R. W. Dimmick. The Distribution of Ruffed Grouse in Tennessee	114
Williams, W. and R. E. Bergenback. Subsurface Distribution of Pennsylvanian Gizzard Group Northwestern Marion County, Tennessee	98
Wilson, R., R. Ketelle and R. E. Bergenback. Stratigraphic Framework and Depositional Environments, Lower Pennsylvanian Rocks, Dorian Cove Area	81
Wofford, B. E. and A. M. Evans. Atlas of the Vascular Plants of Tennessee. I. Pteridophytes and Gymnosperms	32
Wofford, B. E. and A. M. Evans. Atlas of the Vascular Plants of Tennessee II. Magnoliidae: Aristolochiales, Magnoliales, Nymphaeales, Papaverales, Ranunculales	75
Womack, M. L., T. E. Hemmerly, A. A. Forsythe. Black Gum—Exclusive Host of Mistletoe in Lawrence County, Tennessee	89
Woody Plants of the Gorges of the Cumberland Plateau and Adjacent Highland Rim. D. Caplenor	139
Wooten, M. C., M. L. Kennedy and M. J. Harvey. Thompson's Pigmy Shrew, <i>Microsorex Thompsoni Winnemana</i> , in Tennessee	14

## EDITORS NOTE TO CONTRIBUTORS

By Executive Committee action taken at the April 1978 meeting, a per page charge of \$10 will be made to all contributors who submit manuscripts after January 1, 1979 for publication in JTAS. This action was taken reluctantly to help defray increasing publication costs.