

Index

Page numbers in italic type refer to illustrations; numbers in boldface refer to detailed discussions.

A

Aderholt, Robert 196, 197, 198
 aestivating trace 92
 agrichnial 132
 Alabama Dept. of Conservation and Natural Resources 121
 Alabama Museum of Natural History 76, 120, 173, 187, 191, 199, 201
 Alabama Paleontological Society 3, 11, 15, 31, 59, 191, 201
 incorporation 196
 Alabama promontory 42
 Alabama Surface Mining Commission 194, 195
Alabamasauripus 147
Alabamasauripus aldrichi 3, 6, 93
 Aldrich, T. H. 60, 93, 191
Alethopteris 52
Alethopteris valida **161**, 162, 355
 Allen, Ashley 19, 20, 76, 142, 147, 192, 194, **368**
 allochthonous plant material 63
 alluvial plain settings 116
 ALMNH P.985.1.15 99
 ALMNH P.985.1.16 104
 ALMNH P.985.1.7 108
 ALMNH PV987.0001 7
 amateur paleontologists 187
 amniotes 60
Amphibamus 78
 amphibians
 feeding habits 62
 temnospondyl 60, 203
 amphipod crustaceans 123
Amphisauropus 116
 Anniston Museum of Natural History 195, 199
Anthichnium 85
Anthichnium-Limnopus assemblage 8, 115
Anthracodromeus 78
Anthracopus 75
 anthracosaurs 93
Antiquatonia portlockiana 52
Apatichnus? 76
Aphlebia 360
 Appalachian orogenic belt 42
 arachnid 173
 arborescent lycopods
 bark impression 193
 Lepidodendron 155

Lepidophloios 155
Sigillaria 155
 stem impressions 155
Arborichnus 24, 54
Arborichnus repetita 147, **150**
Arborichnus repetitus **321**, 322-325
Archaeothyris 78
 archedictyon 170
Archerpeton 78
Arenicola carbonaria 129
Arenicolites 3, **123**
Arenicolites carbonarius 129
Arenicolites curvatus 129
Arenicolites longistriatus **121**, 123, 129, 332-337
Arenicolites sparsus 129
Arthraria 129
Artisia 160, **165**
Asaphestra 78
Asperipes 9
Aspidaria 343
Aspidiopsis 156, **157**, 345
Astartella concentrica 52
Asteriacites **138**
Asterophyllites **159**, 351
Asterophyllites charaeformis 159, 160, 350
 Atkinson, T. Prescott 21, 76, 186, 195, 196, 199, **368**
Attenosaurus 147
Attenosaurus indistinctus 93
Attenosaurus subulensis 3, 6, 19, 80, **93**, 94, **230**, 231-250
 Auburn University Museum of Paleontology 187
 Ausmus, David 76
 Axsmith, Brian J. 193, **368**

B

Badger, G. 76
 Baird, Don 110
 Baldwin, Jimmy, Jr. 142
 bark
 sub-surface 157
Baropus 76
Batrachichnus 3, 5, 6, 76, 85, 92, 115, 116, 147
Batrachichnus delicatulus 85, 115
Batrachichnus plainvillensis 85
Batrachichnus salamandroides 85
 Bay of Fundy 178
 Bear Gulch Limestone 4
Bechera charaeformis 159
 Bechly, Günter 171
 Bell, Gorden 192
Belorhaphe 132
Belorhaphe protopalaeodictyum 134
 Bernard Price Inst. for Paleontological Research 193
 biochronologies 116
 bioirrigation 123
 bioprint 122

- biotaxonichnofacies 113, 115
 bipedalism 63
 Birmingham News, The 198
 Birmingham Paleontological Society
 3, 15, 19, 59, 187, 191, 201
 bituminous coal resources 39
 bivalves 53, 148
 Black Creek coal zone 40
 Black Warrior Basin 31, 42, 55, 202
 tectonic setting 43
 Blake, Richard 196
 brachiopods 3, 44, 53
 strophomenid 52
 brackish fluviotidal flats 125
Breyeria 173, 174
 Brookwood coal zone 40
 Bryant, Joseph 22
 Buckhorn Lagerstätte 4
 Buildex, Kansas 9
 Burgess Shale 4
 burrows 33
 Burton, Jessie 15, 192
 Buta, Ronald J. 21, 76, 142, 192, 194, 195, 196, **369**
- C**
- Calamites* 19, 31, 33, 47, 50, 153, 345, 350
Calamites goepperti 156, **159**, 351, 353
Calamites suckowii 160, 351
Calamites undulatus **159**, 160, 351, 352
Calamitina undulata 159
Calamostachys 158, **161**, 354
 Campbell County, Tennessee 81
 captorhinomorph reptiles 147
 Carbon Hill, Alabama 191, 203
Carpolithes 164, **165**, 362
 Carriza Arroyo 4
 cast formation 153
 Castlecomer, Ireland 4
Cavernaecola 129
 CaWaCo 195
 Cedrum Coal Mine 202
Cephalerpeton 78
Chaetopterus variopedatus 129
 Chanute Formation 96
Chelichnus 5, 114, 116, 117
Chelichnus duncani 115
 chironomids 123
 larvae 143
 larval traces 144, 145
Cincosaurus 3, 60, 147
Cincosaurus beds
 3, 32, **46**, 78, 81, 85, 86, 92, 121, 125, 147
 age 60
 bedding thickness cycles 54
 bedding thickness variations 52
 cyclicality 48
 estuarine nature 48
 interpretation 47
 lack of dessication 121
 lithology 50
 sedimentary structures 47
 sedimentation 47
 sedimentation rate 55, 60
 siltstone-shale layers 51
 spring-neap cycles 48
 tidal flat nature 50
 trace fossil assemblage 122
Cincosaurus cobbi
 6, 19, 24, 45, 79, 80, **96**, 101, 193, **251**, 253-
 267
Cincosaurus fisheri 96
Cincosaurus jaggerensis 96
Cincosaurus jonesii 93, 96
 clairain 45
 Clayton Lake State Park 5, 10
 Clayton Lake tracksite 4
Clepsydrops 78
 coal ash
 composition 46
 coal balls 51
 coal groups 40
 coal swamp forests 153
 coal swamp trees
 reconstructions 166
 coalbed methane 40
Cochlichnus 147
 Coconino Sandstone 5
 Colbert County, Alabama 138
 Colburn Gem and Mineral Museum 195
 collembolans 169
 Coma galaxy cluster 18
 conglomerate units 44
 Connecticut Valley 179
Cordaicarpon 160, **165**, 364
Cordaites 31, 153, 155, 160, **165**, 172, 173, 364
Cordaites grandifolius 165
Cordaites mansfieldi 165
 Cordova Quadrangle 45, 155
 Cornberg Sandstein 116
Corophioides 129
 crinoids 44
 Crocker, Deborah A. 21
 Cross Mountain Formation 81
 crossbedding 55
 crossveins 170
 crustaceans 150
Cruziana 147
Cursipes 9
Cyclopteris **163**, 164, 345
Cyperites bicarinata 157

D

Dadoxylon oldhamium 161
 Dakota Group 5
 DeChelly Sandstone 117
 decorticated stem 159
 delamination **76**
Delitzschala bitterfeldensis 169
 delta-front environment 55
Dendrerpeton 78, 92
 deposit feeders 132
Desmoinesia muracatina 52
 DeWitt, Robert 22
Diadactes 78
 Dilcher, David L. 193, **369**
Dimetropus 3, 5, 6, 9, 93, 116, 117, 147
 Dinosaur National Monument 5
 dinosaur tracks 5
Diplichnites 35, 47
Diplichnites gouldi 147, **148**, 327-330
Diplocraterion 127, 129
 Diptera 123
 dipterans 123
 larvae 143
 diurnal systems 48
 domichnial 123
 dragonflies 169
Dromopus 5, 9, 81, 116, 117
Dromopus agilis 76
 durain 45

E

Early Pennsylvanian 3, 32, 39, 67
 paleoclimate **40**
 tectonics **40**
 Early Permian 170
 eccentricity cycle 44
 echinoderms 53
 Eldridge, Alabama 191
 Entrada Sandstone 5
Eremopteris 161
 ethics **189**
 ethoichnofacies 113, 116
Eubrontes 6
 eurypterids 150
 extramorphology 79

F

fauna 113
 stenohaline 121
 "feather-stitch trails" 130
 Fern Springs Road Mine 76, 81, 82, 191, 203
 ferns 153
 fish behavior
 abrupt turning 64
 anal fins 63

caudal fins 63
 following 64
 mode of propulsion 63
 multiple trails 65
 parallelism 65
 schooling 8, 64
 fish trails
 (see *Undichna*) 60
 Florida Museum of Natural History 155
 fodinichnial 132
 foreland basins 42
 fossil trackways
 physical significance 109
 fusain 45

G

Galloway Coal Company 3
 Mine No. 11 8, 122
 Garnett, Kansas 78, 96
 gas-escape structures 19, 49, **177**
Gaskohle 4
 gastropods 53
 genal spine imprints 150
 Geological Survey of Alabama 45
 George, Eldon 6
Geotimes 198
Gephyrostegus 78, 93
 Gillespy coal zone 45, 53
Gilmoreichnus 9, 116
 glaciation 44
 glenoacetabular distance 60, 63, **65**
 gleying 50
 Gondwana 40
Gordia 136
Gordia indianaensis **137**
 graded beds 48
Grallator 6
 Granton shrimp bed 4
 Great Track Layout 193, 194
 Griggs, James 186, 197, 198, 199
 GSA 1052-245 138

H

Hamilton Quarry 4
 Hamrick, Bruce 196
Haplotichnus 123, **136**
Haplotichnus indianensis 125, **136**, 137
Haplotichnus ornatus **137**, 138
Haptodus 78
Harpagnichnus 116
 Hartselle Sandstone **138**
 Haubold, Hartmut 74, 76, 196, 203, **369**
 Hebert, Brian 6
Helminthopsis 148
 hemimatabulous 172
 Hermit Shale 117

Herr, Larry A. 23
 highwall 31, 33, 54, 170
 Hindostan beds 125, 130
Holcospermum **163**, 164, 364
Holcospermum maizeretense 163
Holcospermum mammillatus 163
Holcospermum multistriatus 163
 Holly Grove Mine 93, 96, 97
 specimen 95
 Holocene 147
 holotypes 85
Homaloneura 173
 Hood, Samuel 194
 Hooks, G. E. III 21, 112, 197, **370**
 Hot Springs Mammoth Site 5
 Howell, Ed 195
 Hueco Group 8, 115
 Hunt, Adrian P. 197, **370**
 Huntsville Times, The 198
Hydromeda fimbriata 96
 hydromorphic paleosols 50
Hylonomus 78
Hylopus 75, 76
Hylopus ? trifidus 76

I

Ichniotherium 9, 116, 117
 ichnocoenosis 113
 ichnofacies 113
 general 5
 ichnofaunal traditions
 biotaxonomic 113
 ethological 113
 ichnotaxonomy
 general 4
 insect feeding traces 147
 insect larvae 147
 intermontane environments 117
 intertidal environment 32

J

Jackson, Wendy Allen 195
 Jagger coal seam 8, 170
 Jagger coal zone 109
 Jasper, Alabama 147
 Jasper *Daily Mountain Eagle* 195
 Jasper Kiwanis Club 196
 jawed fishes 63
 Jefferson County, Alabama 48
 Joggins, Nova Scotia 4, 81, 96, 178
 Johnson, Randy 194, 195
 Jones, W. B. 191

K

Kansas, Alabama 76, 96, 97, 191

 unnumbered specimen 97, 98
 Kansas City, Missouri 96
 Karoo Basin 193
 Kennedy, Paul 196
 Keota, Oklahoma 9
 Kinney Brick Quarry 4
 Kopaska-Merkel, David C. 196, 197, **371**
Kouphichnium 3, 16, 20, 47, 147, **148**
Kouphichnium aspodon 122, **280**, 281-283, 302-306
Kouphichnium isp. **280**, 283-296, 308-320
Kouphichnium rossendalensis 150
 Kukulová-Peck, Jarmila 172

L

Labandeira, Conrad 173
 Lacefield, James A. 76, 173, 191, 194, 196, **370**
 Lagerstätten
 Konservat 4
 Konzentrat 4, **39**
 Lais, Vicki 196
 Lamb, James 192
 Langsettian 177
Lanicoidichna 129
Laoporus 114
 Lark Quarry 5
 Lata, Tommy 15
 Late Mississippian 42
 Late Silurian 170
 Laurasia 153
 Laurussia 40
 Le Formation 96
 leaf cushions 155, 157
Lepidocarpon 347
Lepidodendron 31, 52, 155
Lepidodendron aculeatum **155**, 156, 341
Lepidodendron laricinum 157
Lepidodendron laricinus 156
Lepidodendron lycopodioides 344, 347
Lepidodendron obovatum **155**, 156, 341, 342
Lepidofloyos laricinum 157
Lepidophloios 31, 52, 155
Lepidophloios laricinum **157**
Lepidophloios laricinus 157, 342, 343
Lepidophylloides intermedium **157**, 158, 364
Lepidophyllum intermedium 157
Lepidophyllum majus 157
Lepidostrobophyllum cf. *majus* **157**, 160, 348
Lepidostrobophyllum majus 157
Lepidostrobos **157**, 158, 346, 347
 Lerner, Allan J **371**
 limestone banks 42
Limnopus 9, 76, 116, 117
Limnosaurus alabamensis 96
Limnoscelis 78
Limulicubichnus 150
 limulid resting traces 150

Limulus 150
 listservs
 Paleonet 198
 Skolithos 198
 VrtPaleo 198
 lithofacies 81
 longitudinal scars 157
 Lott, Terry A. 193, **371**
 Lower Carboniferous 169
 Lower Pennsylvanian 153
 Lower Permian Red Beds 85
 Lowery, James 194, 196
 Lucas, Spencer G. 197, **372**
Lychnophorites laricinum 157
 lycophytes 153
 lycopods 153
Lyginopteris hoeninghausi **161**, 162, 357
 Lyons Sandstone 117

M

MacDonald, Jerry 6, 10, 112, 194, 196
 MacDonald, Pearl 112, 196
Macromerion 78
 Mansfield Formation 125, 135, 136, 137
 Mansfield, Indiana 9
 Mansky, Chris 6
 manus 60, 65
 marine transgressions 44
Mariopteris 52
Mariopteris pottsvillea 161
 Martin, Anthony J. 22, 120, 192, 197, **372**
 Mary Lee coal bed 8, 45
 ash content 46
 heating value 46
 interpretation 46
 original peat thickness 46
 sulfur content 46
 thickness 45
 Mary Lee coal group 177
 Mary Lee coal seam 19, 31, 195
 Mary Lee coal zone 3, 31, 40, 45, 76, 109, 147
 ichnotaxa 80
Matthewichnus **81**, 93
Matthewichnus caudifer **81**, 82, **210**, 211
 Mazon Creek 4
Mazostachys 354
 McCarthy, Milton 194, 195, 198
 McCreary County, Kentucky 96
 McWane Science Center 192, 199
Medullosa 155, 355, 360, 361
Meganeura monyi 169, 173
 Megasecoptera wing 175
Mermia
 ichnofacies 147
 mesotidal regime 48
 mica 32

Milankovitch cycles 44, 46
 Milner, Andrew R. C. 6, 10
 Minkin, Missy 197
 Minkin, Steven C. 20, 76, 192, 194, 195, **372**
 Paleozoic Footprint Site 30
 molluscs 44
 Montceau-les-Mines 4
 Morrowan 39
 mud flats
 formation 153
Myeloxylon **163**, 164
 myriapods 148

N

Nanopus 76, **81**
Nanopus caudatus 76, 81, 85, 92
Nanopus obtusus 85, 92
Nanopus quadratus 85, 92
Nanopus quadrifidus 92
Nanopus reidiai **85**, 86, 92, **210**, 212-229
 negative relief 60
 nematodes 147
 neopterous insects 169
Nereites 54
Neuralethopteris **163**
Neuralethopteris biformis 162, **163**, 355, 358, 359
Neuralethopteris pocahontas 162, **163**, 358, 359, 360
Neuropteris 47, **52**
 New Acton Coal Company 15, 19, 121, 177, 194, 197
 New Castle coal bed 45, **50**
 sulfur content 51
 thickness 50
 New Castle coal seam 19, 121, 177
 New Castle roof shale
 erect plant axes 52
 plant ecology 51
 terrestrial setting 52
 New Mexico
 paleogeographic map 116
 New Mexico Museum of Natural History and Science 197
 NMMNH P-40012 7
 nodular limestone **52**
Notalacerta 3, 75, 76, 147
Notalacerta missouriensis 80, **96**, 97, 202, **251**, 252

O

Okefenokee Swamp 46
 Oneonta High School 192
Oniscoidichnus filiciformis **138**
Ophiacodon 78
 opistosomal marks 150
 Ordovician 42, 148
 Orick, Billy 15, 195, 197
Ornithichnites 75, 76
 orogenic belts 42
 orogenic highlands 42

Osborne, W. Edward 179
 Ouachita orogenic belts 42
 overbank sedimentation 46
 oxygen isotope record 44
 oxygenic partial pressure 169

P

pace 63
 pace angulation 63, 65
 Palaeodictyoptera
 biology 172
 wing structure 171
 palaeodictyopterans 169
Palaeophycus 129, 147, **148**
Palaeophycus alternatus 129
Palaeophycus striatus 129
Palaeophycus triadicus 129
Palaeophycus virgatus 129
 palaeopterous insects 169
Palaeosauropus 75
Palaeosauropus caudifer 81
Palaeothyris 78
 paleoecology
 general 5
 paleoenvironment 5
Paleosauripus 9
 Paleozoic tetrapod ichnofaunas
 global map 114
Palmatopteris furcata 360
 Pangaea 39
 plate reconstructions 42
 paratypes 85
 Pashin, Jack C. 31, 196, **373**
 peat swamps 46
 pelycosaurs 93
 pes 60, 65
 Peterson Dinosaur Quarry 6
 Peterson, Rod 6
 Peterson, Ron 6
Petrolacosaurus 78
 Phanerozoic 113
 phantom taxon 79
 photographic atlases
 amniote trackways **251**
 fish swimming traces **268**
 large anthracosaur tracks and trackways **230**
 small amphibian trackways **210**
 xiphosuran resting traces **321**
 xiphosuran traces **280**
Phycodes pedum 132, 134
 phytoliths 46
 pith cast 159
Plangtichnus 123
Plangtichnus erraticus 134, 136
Planolites 123, 133
 Plant Fest 24

plants, fossil **153**, 341-365
 Pleistocene glaciation 44, 47
 polychaete worms 123
 positive relief 60
 Pottsville Formation
 3, 8, 19, 31, **39**, 60, 76, 153, 170, 173, 177
 age 42
 coal production **40**
 coal zones 40
 coastal plain environments 44
 cycle timespans 44
 depositional cycles 42, 44, 45
 generalized stratigraphic section 41
 history of transgressions and regressions 42
 lithology 44
 paleoecology 8
 paleoenvironment 43
 paleogeography 46
 peat swamp complexes 45
 rock types 40
 sediment types 44
 stratigraphy **39**
 Pratt coal zone 40
 Precambrian 147
 prosomal marks 150
Protoclepsydrops 78
Protovirgularia 147, **148**
Psaronius 155
Pseudobradypus 9, 76
 pteridosperms 31
 Pyenson, Nicholas D. 22, 193, 194, **373**
 pyrite 32, 46

Q

Quadropedia prima 96
 quadrupedalism 63

R

raindrop imprints 48
 rainprints 177
 Rajang Delta 48
 Red Mountain Museum 192
 Redpath Museum 76
 Reid, Dennis 194
 Reid, Dolores 15, 19, 85, 192, 194, 198
 Reid, Don 6
 Relihan, Bruce A. 76, 194, 195, **373**
 Rheic Ocean 40
Rhizocorallium 129
Rhyniella 169
 Rindsberg, Andrew K.
 22, 192, 194, 195, 196, 197, 198, **374**
 Robledo Mountains 6, 9, 92, 115, 116, 194
 tracksites 4
 Rocky Hill Dinosaur State Park 5
 Rotliegende 115

S

Salichnium 92
 sandstone-shale couplets 147
 Sangre de Cristo Formation 117
Sauropus 75
Sauropus primaevus 75
Sauropus sydnensis 75
Sauropus unguifer 75
Schmidtopus 9
Science 198
 seed ferns 31, 153
 Seilacherian ichnofacies 113
Selenichnites 147, **150**
Selenichnites langridgei 150
 shale
 burrowing 53
 carbonaceous 33
 compaction 121
 pinstripe-bedded 47
 rippled-bedded 47
 roof 51
 siderite 47, 53
 siderite nodules 47, 51
Sigillaria 31, 155, 349
Sigillaria elegans 343
Sigillariostrobus quadrangulatus 347
Skolithos 180
 sociology 5
 Spencer, Thomas 22
Sphenophyllum **52**, 364
 sphenophytes 31
 sphenopsids 153
Sphenopteris **52**
Sphenopteris elegans **161**, 162, 356
Sphenopteris hoeninghausi 161
Sphenopteris pottsvillea **161**, 162, 356
Spheropezium 75
Spirodesmus interruptus 134
Spirorbis carbonarius 157
 St. George Dinosaur Discovery Site 5
 Stanley Cemetery Flora 153
 Stanton Formation 96
 Stephanian 78
 Steven C. Minkin Paleozoic Footprint Site
 121, 177, **199**
 plaque 199
Stigmatia 47, **52**
 straddle 63
 stratigraphy
 general 5, 39
 sequence 44
 stride 63
Stylocalamites undulatus 159
 subaqueous environment 32
 substrate 113
 Surface Mining Control and Reclamation Act 191, 194

swamp forests 52
 swimming speeds
 Undichna maker 63
 swimming trails 59
Syringodendron 156, **159**, 160, 349

T

Tambach Sandstein 117
 taphonomy
 general 4
 telson drag
 Kouphichnium 150
 tetrapod behavior
 abrupt turns 67
 belly-dragging 69
 diagonalism 65
 gait 69, 79
 group movement 65, 67
 looping 67
 manus-pes sequences 65
 sideways movement 65
 stimulus-response 67
 tail-dragging 69
 variations in speed 65
 tetrapod body fossils 8
 tetrapod ethnoichnofacies 116
 tetrapod footprints **75**
 Amniota 78
 classification criteria
 toe marks 76
 "lumpers" 79
 "splitters" 79
 ichnotaxonomy 78
 Microsauria 78
 oblique progression 116
 original surface issues 79, 81
 original surface tracks 109
 pace angulation 96
 Reptiliomorpha 78
 skeletal record 78
 tail impressions 81
 Temnospondyli 78
 temnospondyls 81
 undertrack issues 79
 tetrapod ichnofacies 113
Thalassinoides 134
Thenaropus 75, 76
Theranopus 75
 tidal rhythmites 3, 147, 151
 tipulids 123
 larval traces 143, 145
Tisoa 129
Tonganoxichnus 9
 Townley, Alabama 202
 tracemakers 59
 Track Meets 11, **20**, 59, 192, 201, 202

- T-shirt logo 22
- trackways
- captorhinomorph 9
 - horseshoe crab
 - (see also *Kouphichnium*) 20
 - population estimates 59
 - xiphosuran 33
- transitional preservation 96
- Treptichnus* 3, 59, **123**, 143
- ontogeny of tracemakers 125
- Treptichnus aequalternus* 134
- Treptichnus apsorum* **121**, **132**, 332-337
- Treptichnus bifurcus* 123, **134**, 135, 147, 151
- Treptichnus coronatum* 134
- Treptichnus meandrinus* 134
- Treptichnus lublinensis* 134
- Treptichnus pedum* 132, 134
- Treptichnus pollardi* 134
- Treptichnus rectangularis* 134
- Treptichnus triplex* 134
- Trichophycus* 129
- Trichophycus lanosus* 129
- Trichophycus venosus* 129
- Trigonocarpum* 165
- Trigonocarpus* 155, 164, 362
- Trigonocarpus ampulliforme* 164, 362
- trigonotarbid arachnid 175
- trilobites 150
- Triogonocarpus ampulliforme* **165**
- Trisaurus secundus* 96
- Tucker, Jay 76
- Tucker, Lauren 197
- Tuditanus* 78
- Tuscaloosa News, The 198
- Twieg, Kathy 21, 194, 195, 196
- U**
- U-burrows 122, 123
- UC 36076 137
- UC 36077 136
- UC 54099 135
- Uchman, Alfred **374**
- UCM (H002) 81, 84
- UCM (H003) 86, 89, 92
- UCM 0002 85, 214
- UCM 0004 85, 215
- UCM 0009 93
- UCM 0010 181
- UCM 0011 85, 215
- UCM 0016 93
- UCM 0017 96, 107, 253
- UCM 0018 96, 253
- UCM 0021 93
- UCM 0024 93
- UCM 0024/0025 238
- UCM 0025 93
- UCM 0026 92
- UCM 0060 85, 86, 88, 212
- UCM 0064 269
- UCM 0067 109, 266
- UCM 0068 225
- UCM 0071 224
- UCM 0074 269
- UCM 0076 63, 65, 66, 69, 85, 219, 220
- UCM 0078 109
- UCM 0084 63, 65, 85
- UCM 0087 96, 254
- UCM 0092 332
- UCM 0093 36, 269
- UCM 0098 245
- UCM 0107 150
- UCM 0118 283
- UCM 0124 244
- UCM 0125 109, 193
- UCM 0140 34, 85, 213
- UCM 0143 332
- UCM 0147 333
- UCM 0154 35, 148
- UCM 0159 85
- UCM 0167 85, 214
- UCM 0174 80, 96, 255
- UCM 0174/0175 101
- UCM 0175 80, 96, 255
- UCM 0177 85, 213
- UCM 0179 333
- UCM 0180 334
- UCM 0191 85, 212
- UCM 0195 85
- UCM 0196 85
- UCM 0199 93
- UCM 0200 93
- UCM 0202 233
- UCM 0205 80, 93, 234
- UCM 0208 96, 256
- UCM 0214 302
- UCM 0215 302
- UCM 0219 93, 234
- UCM 0223 96, 252
- UCM 0227 303
- UCM 0229 96, 100, 252
- UCM 0237 96, 256
- UCM 0242 80, 93, 235
- UCM 0249 85, 221
- UCM 0250 257
- UCM 0250-0263 96
- UCM 0251 257
- UCM 0252 258
- UCM 0253 109, 258
- UCM 0254 257
- UCM 0255 259
- UCM 0256 109, 259
- UCM 0257 258
- UCM 0258 260

UCM 0259 260
UCM 0260 261
UCM 0261 261
UCM 0262 261
UCM 0263 80, 102
UCM 0267 109
UCM 0270 93, 247
UCM 0278 16
UCM 0281 85, 216
UCM 0282 93
UCM 0285 81, 211
UCM 0287 270
UCM 0300 233
UCM 0302 85, 216
UCM 0311 85, 86, 87
UCM 0312 85
UCM 0313 85, 217
UCM 0318 85, 217
UCM 0331 16, 35, 109, 264
UCM 0333 293
UCM 0340 109
UCM 0357 85, 86, 91, 218
UCM 0359 17
UCM 0364 85, 213
UCM 0370 330
UCM 0374 16
UCM 0387 294
UCM 0388 16, 304
UCM 0393 327
UCM 0394 327
UCM 0417 334
UCM 0419 335
UCM 0421 335
UCM 0426 303
UCM 0430 303
UCM 0437 304
UCM 0447 85, 218
UCM 0448 85, 217
UCM 0455 61, 270
UCM 0469 64, 80, 81, 82
UCM 0477 305
UCM 0479 290
UCM 0482 263
UCM 0484 70
UCM 0485A 296
UCM 0487 150, 297
UCM 0489 282
UCM 0490 282
UCM 0507 247
UCM 0523 229
UCM 0546 284
UCM 0553 223
UCM 0556 284
UCM 0569 250
UCM 0571 85, 222
UCM 0602 297
UCM 0617 283
UCM 0620 285
UCM 0624 216
UCM 0629 85
UCM 0645 93, 94
UCM 0649 85
UCM 0652 81, 82, 83
UCM 0662 282
UCM 0666 327
UCM 0669 227
UCM 0670 262
UCM 0672 262
UCM 0675 262
UCM 0676 228
UCM 0677 70, 228
UCM 0678 270
UCM 0680 227
UCM 0689 285
UCM 0690 266
UCM 0692 290
UCM 0723 286
UCM 0728 61
UCM 0731 271
UCM 0743 322
UCM 0788 122, 336
UCM 0806 276
UCM 0808 219
UCM 0827 305
UCM 0833 85, 218
UCM 0878 224
UCM 0888 325
UCM 0902 305
UCM 0945 109
UCM 0949 92, 222
UCM 0953 328
UCM 0954 328
UCM 0959 286
UCM 0969 81, 211
UCM 0973 85, 90, 219
UCM 0987 276
UCM 0989 62, 270
UCM 1029 271
UCM 1030 336
UCM 1031 85
UCM 1047 271
UCM 1051 150, 298
UCM 1053 150, 298
UCM 1057 298
UCM 1058 150, 298
UCM 1060 150, 299
UCM 1061 150, 299
UCM 1068 109, 264
UCM 1070 281
UCM 1071 281
UCM 1072 282
UCM 1074 34, 93, 231
UCM 1075 67, 71, 96, 103, 109, 264
UCM 1076 171

- UCM 1076a 172
schematic of wing venation 173
- UCM 1077 337
- UCM 1088 224
- UCM 1092 243
- UCM 1093 239
- UCM 1095 243
- UCM 1096 254
- UCM 1117 287
- UCM 1118 284
- UCM 1119 287
- UCM 1124 294
- UCM 1141 80, 85, 86
- UCM 1142 80, 85, 226
- UCM 1152 323
- UCM 1153 323
- UCM 1154 324
- UCM 1156 324
- UCM 1157 325
- UCM 1168 182
- UCM 1206 93, 235
- UCM 1207 283
- UCM 1209 96, 252
- UCM 1214 80, 249
- UCM 1216 80, 93, 236
- UCM 1220 290
- UCM 1224 286
- UCM 1264 288
- UCM 1265 288
- UCM 1267 329
- UCM 1268 306
- UCM 1281 292
- UCM 1289 269
- UCM 1300 276
- UCM 1303 68
- UCM 1304 64, 67, 276
- UCM 1319 250
- UCM 1345 287
- UCM 1348 62, 65, 272
- UCM 1349 292
- UCM 1368 294
- UCM 1370 328
- UCM 1376 295
- UCM 1377 295
- UCM 1384 295
- UCM 1390 296
- UCM 1397 293
- UCM 1402 289
- UCM 1410 291
- UCM 1411 291
- UCM 1414 289
- UCM 1437 150, 299
- UCM 1438 237
- UCM 1441 150, 300
- UCM 1470 236
- UCM 1470-72 93
- UCM 1476 96, 105, 106, 265
- UCM 1477 109, 265
- UCM 1491 239
- UCM 1492 239
- UCM 1495 322
- UCM 1498 237
- UCM 1505 306
- UCM 1568 150
- UCM 1589 226
- UCM 1621 240
- UCM 1622 241
- UCM 1623 244
- UCM 1639 245
- UCM 1650 147
- UCM 1670 273
- UCM 1687 241
- UCM 1692 249
- UCM 1724 229
- UCM 1728 273
- UCM 1729 64, 67, 272
- UCM 1730 275
- UCM 1731 274
- UCM 1733 274
- UCM 1734 61, 273
- UCM 1735 309
- UCM 1737 308
- UCM 1738 308
- UCM 1740 309
- UCM 1742 310
- UCM 1744 311
- UCM 1748 311
- UCM 1749 312
- UCM 1752 150, 313
- UCM 1754 232
- UCM 1755 150, 313
- UCM 1757 314
- UCM 1758 315
- UCM 1761 316
- UCM 1762 150, 300, 313
- UCM 1764 315
- UCM 1767 317
- UCM 1771 317
- UCM 1772 317
- UCM 1777 318
- UCM 1780 318
- UCM 1781 319
- UCM 1786 320
- UCM 1788 319
- UCM 1794 320
- UCM 1797 223
- UCM 1798 238
- UCM 1801 291
- UCM 1805 337
- UCM 1814 225
- UCM 1815 267
- UCM 1817 242
- UCM 1820 329
- UCM 1821 226

UCM 1825 263
 UCM 1838 225
 UCM 1842 267
 UCM 1856 215
 UCM 1915 249
 UCM 1924 248
 UCM 2026 126, 128
 UCM 2027 131
 UCM 2029 131
 UCM 2038 124
 UCM 2072 178, 182
 UCM 2237 274
 UCM 2249 248
 UCM 2253 247
 UCM 2267 231
 UCM 2379 240
 UCM 2380 242
 UCM 2382 275
 UCM 2446 271
 UCM 2448 272
 UCM 2461 301
 UCM 2466 301, 330
 UCM 2469 296
 UCM 2494 26
 UCM 2495 293
 UCM 2497 286
 UCM 2507 229
 UCM 2514 229
 UCM 2516 275
 UCM 2518 304
 UCM 2528 246
 UCM-P 15 342
 UCM-P 153 348
 UCM-P 154 348
 UCM-P 155 342
 UCM-P 158 359
 UCM-P 159 342
 UCM-P 160 342
 UCM-P 162 349
 UCM-P 163 344
 UCM-P 165 343
 UCM-P 169 356
 UCM-P 172 343
 UCM-P 173 341
 UCM-P 176 352
 UCM-P 180 343
 UCM-P 184 355
 UCM-P 194 354
 UCM-P 200 345
 UCM-P 201 353
 UCM-P 202 352
 UCM-P 215 364
 UCM-P 216 354
 UCM-P 218 350
 UCM-P 219 347
 UCM-P 220 360
 UCM-P 221 344
 UCM-P 224 344
 UCM-P 227 357
 UCM-P 25 352
 UF 18902-33933' 346
 UF 18902-33985 345
 UF 18902-33986 159
 UF 18902-33988 163
 UF 18902-33989 165, 364
 UF 18902-33990 159
 UF 18902-33992 159, 353
 UF 18902-33993 157, 346
 UF 18902-33994 159, 351
 UF 18902-34007 157, 347
 UF 18902-34008 157, 341
 UF 18902-34010 350
 UF 18902-34011 161, 354
 UF 18902-34013 157, 345
 UF 18902-34014 155, 341
 UF 18902-34016 159, 349
 UF 18902-34018 159, 352
 UF 18902-34019 351
 UF 18902-34022 359
 UF 18902-34023 163, 358
 UF 18902-34024 358
 UF 18902-34025 163, 358
 UF 18902-34027 358
 UF 18902-34028 358
 UF 18902-34029 163, 358
 UF 18902-34030 161
 UF 18902-34031 360
 UF 18902-34033 161, 356
 UF 18902-34035 360
 UF 18902-34036 161, 355
 UF 18902-34037 355
 UF 18902-34037' 355
 UF 18902-34038 161, 357
 UF 18902-34039 161, 357
 UF 18902-34040 165, 362
 UF 18902-34040' 165, 362
 UF 18902-34041 165, 362
 UF 18902-34042 157, 346
 UF 18902-34043 159, 351
 UF 18902-34044 354
 UF 18902-34045 354
 UF 18902-34046 163
 UF 18902-34046' 163, 345
 UF 18902-34047 159, 351
 UF 18902-34350 163, 359
 UF 18902-34351 163
 UF 18902-34362 165, 362
 UF 18902-34362' 165
 UF 18902-34364 163, 361
 UF 18902-34364' 163, 361
 UF 18902-34365 157, 347
 UF 18902-34366 159, 351
 UF 18902-34367 347
 UF 18902-34368 165, 364

UF 18902-34369a 159, 348
 UF 18902-34369b 165
 UF 18902-34370 165
 UF 18902-34370b 364
 UF 18902-34371 157, 343
 UF 18902-34372 157, 347
 UF 18902-34373a 159, 350
 UF 18902-34373b 157
 UF 18902-34374 159, 348
 UF 18902-34375 157, 346
 UF 18902-34376 362
 UF 18902-34377 159, 348
 UF 18902-34378 157, 364
 UF 18902-34379 159, 349
 UF 18902-36866 353
 UF 18902-36870 357
 UF 18902-36873 361
 UF 18902-36875 356
 UF 18902-36877 362
 UF 18902-36879 362
 UF 18902-36883' 361
 UF 18902-36890 361
 UF 18902-36891 361
 UF 18902-36896 361
 UF 18902-36901 361
 UF 18902-36903 362
 UF 18902-36908 361
 UF 18902-48553 353
 underclay beds 50
Undichna
 3, 8, 24, 32, 36, 47, 59, 60, 63, **69**, 122, 147, 151, **268**,
 269-276
 amplitudes 60
 Union Chapel Mine
 arthropod body fossils 169
 as Lagerstätte 3, **39**
 biostratigraphy 9
 collectors 76
 depositional environments 32
 discovery 11, **15**, 191
 estuarine nature 32
 fish trail properties 60
 Fossil Footprint Preservation Act 196
 fossil plants 153
 freshwater paleoenvironment 121
 gas-escape structures 180
 geography 8
 highwall 31, 195
 ichnofacies 8
 ichnotaxonomy 6
 insect wings **170**
 invertebrate traces **121**, **147**
 lithology 32
 locality 3, 39, 121, 155
 paleobiogeography 8
 paleoecology 8
 paleoenvironment 9, 31, 121, 151

paleoequatorial setting 31
 paleogeographical setting 32
 photographs 2, 20, 21
 photography of specimens 23
 plant fossils **153**, 341-365
 preservation 10
 preservation effort award 366
 rock colors 32
 rock types 19, 31
 sedimentation rate 67
 shale properties 31
 significance 6, 63, 109, 192
 stratigraphic section **45**, 49
 stratigraphy 8
 taphonomy 6, 153
 tetrapod traces 75
 tidal flat nature 9
 trackway exhibit 24
 undertracks 6, 32, 60
 vertebrate traces **59**, **75**
 website 23, 147, 192
 University of Alabama 188, 203
 US Bureau of Land Management 194
USA Today 198
 Utley coal zone 40

V

van Allen, Howard 6
 vertebrate tracks
 classification criteria 76
 digitigrade 75
 generic names 76
 pentadactyl 75
 plantigrade 75
 properties 60
 tetradactyl 75
 vitrain 45

W

Walker County, Alabama
 3, 45, 147, 153, 170, 177, 191
 Wapske Formation 132
 Warrior coal basin 39
 Westphalian A 3, 79, 173, 177
 Westphalian B 81
 Westphalian D 92
Whittleseya 155
Whittleseya elegans **163**, 164, 361
 Workshop on Permo-Carboniferous Ichnology
 25, 120, 203
 logo 197
 worm-like organisms 148

X

xiphosuran traces 147
 xiphosurans

unassigned traces **150**, 297-301, 313

Y

Yacimiento Los Reyunos Formation 117

Z

Zwickau, Germany 92