

SAVING THE UNION CHAPEL MINE: HOW A GROUP OF DETERMINED AMATEURS TEAMED UP WITH PROFESSIONALS TO SAVE A WORLD-CLASS TRACKWAY SITE IN ALABAMA

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ABSTRACT: In 2004, ownership of the Union Chapel Mine was transferred from the New Acton Coal Company to the State of Alabama, thus making it more likely that the site will be available for research and teaching for many years to come. This article describes how the Alabama Paleontological Society, Inc. (APS), together with the support of professional geologists and paleontologists, government officials, and the news media, were able to bring about the preservation of one of the most significant Carboniferous track sites in the world.

INTRODUCTION

The discovery of rare fossil vertebrate trackways at the Union Chapel Mine in late 1999 was a pivotal event both for Alabama paleontology and for the group of amateurs who salvaged the trackways and brought them to the attention of professional paleontologists. For Alabama paleontology, the discovery brought back to light a 1930 Bulletin of the Alabama Museum of Natural History by T. H. Aldrich and W. B. Jones, who first described the tetrapod trackways discovered by miners in an underground coal mine in Carbon Hill, Alabama. Amazingly, the Alabama Museum of Natural History still had dozens of the old bulletins to sell to interested collectors — they had been stored in the basement for 70 years. This intriguing publication documented the occurrence of spectacular pre-dinosaur trackways in shale deposits associated with coal seams in Walker County but suggested there might be little scientific information to be derived from such trace fossils. Over the ensuing years, no further scholarly publications focussing on Carboniferous vertebrate trackways in Alabama emerged despite a very active coal mining industry. Other trackways must have come to light but been ignored or forgotten in private collections. No systematic mechanism, such as has been created for archaeological sites, exists for surveying excavations for possible fossils.

During the second half of the 20th century, particularly in the 1980s and 1990s, there was an explosion of interest in fossil tracks among paleontologists. This was fueled by the discovery of numerous dinosaur trackways in the American West and elsewhere and the realization that important scientific information could be derived from trace fossils. Trace fossils yield information about behavior that complements that obtained from the study of skeletal remains. In the case of the Alabama trackways, the identity of many of the track makers remains to be determined because skeletal remains from the Carboniferous are much less abundant

than are those from the era of the dinosaurs. Therefore, for some long extinct organisms, these trace fossils showing their activity in the coal swamps represent the only known record of their existence, pages from a lost book of early life preserved in thin layers of shale.

Despite the dearth of publications on trackways in Alabama, the Union Chapel Mine trackways were not the first to be discovered in Alabama since the work of Aldrich and Jones (Rindsberg, 1990; Lacefield and Relihan, 2005). Other sites, including the Fern Springs Road Mine near Eldridge, Alabama, and another mine near Kansas, Alabama, had yielded similar trackways before the Union Chapel Mine discovery. Jim Lacefield, author of *Lost Worlds in Alabama Rocks: A Guide to the State's Ancient Life and Landscape*, includes pictures of Kansas trackways in his book, and he once commented to the Birmingham Paleontological Society (BPS), the former designation of the Alabama Paleontological Society (APS) prior to its incorporation in 2002, that the Kansas site had a greater yield of tracks than the Union Chapel Mine. Nevertheless, no systematic research was conducted on the Fern Springs Road and Kansas fossils. Any material recovered from these sites is dispersed into private collections, and because the sites have now both been reclaimed, any further collecting has become impossible. The abandonment of surface coal mines after mining ceased, an all too frequent occurrence in the past, was prohibited by Congress in 1977 by the passage of the Surface Mining Control and Reclamation Act (U.S. Code Title 30, Chapter 25).

The discovery and documentation of Union Chapel Mine trackways by members of the BPS/APS is described elsewhere in this monograph (Allen, 2005; Buta and Minkin, 2005) and is summarized briefly below for the reader. The documentation effort alone was a remarkable achievement. All of the collectors involved remember how unusual it was to bring fossils collected independently during routine field trips to the "track meets" for photographic documentation. Thus, each member had an opportunity to see what the others had

found. But, even during the first track meet, the group did not have a full appreciation of the significance of the site. Eventually, it became clear that the Union Chapel Mine was an extraordinary fossil site, the kind that might be worth preserving for future studies and research. This chapter documents the strategy, ultimately successful against very long odds, in which the group pursued the seemingly impossible task of extricating the site from an exacting legal requirement that it be reclaimed and turned back into farmland or woodland.

THE BEGINNING

It began in late 1999 at the monthly meeting of the Birmingham Paleontological Society (BPS), a group of amateur fossil collectors in north central Alabama. The BPS was founded in 1984 by Gorden Bell and James Lamb, two local paleontologists, to help support the newly established Red Mountain Museum. Fifteen years later the Society still existed, but the Red Mountain Museum had been subsumed as part of the newly created McWane Science Center, with much of the Museum's collection (still in packing crates at the time of this writing) moved to that center. Gorden Bell had taken a position with a museum in Texas, and James Lamb was working on his PhD in vertebrate paleontology at North Carolina State University. The BPS was now primarily a group of amateurs who enjoyed monthly academic presentations and field trips.

Ashley Allen brought to a BPS monthly meeting in December 1999 some trackways that he had recently found at a coal mine in Walker County. Ashley, a science teacher at Oneonta High School in Oneonta, Alabama, had learned of the site from one of his students, Jessie Burton (see Allen, 2005). Ashley always had been on the lookout for tetrapod trackways in his numerous visits to surface coal mines in the Warrior basin, and his first visit to the Union Chapel Mine (with permission from the mine owner, Dolores Reid) immediately yielded several beautiful specimens. Ashley recommended making the mine the site for an upcoming BPS field trip, and such an outing was scheduled for January 23, 2000. Mrs. Reid had granted permission for the BPS to collect without restriction at the site.

When that day arrived, the weather was cloudy and drizzly, and only eleven people attended the outing, about half the usual number. Ashley led the way in, and the group began to explore a series of large spoil piles in front of a high wall. People started finding trackways immediately, along with spectacular plant fossils (Fig. 1). Despite the rarity of trackways in other localities, the Union Chapel Mine seemed to have them in abundance. Members found tracks throughout the spoil piles, and, generally, had a grand time.

Initially, members simply collected tracks and took them home to their private collections according to the usual way such field trips are conducted in amateur fossil groups. Over the ensuing months, a core group of people kept making individual trips to the site. Steve Minkin, a geologist employed at the Army Chemical Weapons Incinerator in Anniston, took his mother out to the site one day. After a couple of hours of unproductive

searching, they sat down to rest on the side of one of a series of hillocks among the spoil piles. He immediately found that there were small, very high quality tracks right under his feet. That portion of the mine subsequently became the most productive part of the site, particularly for small to medium tetrapod tracks.

THE DECISION

During the spring and summer of 2000, the BPS continued to collect at the Union Chapel Mine site. As specimens were accumulated by Society members, it became evident that the sheer number of specimens, as well as the size of some of the slabs, were greater than the occasional weekend collector could hope to store in a private collection. Discussions at the meetings began to turn to how much people were finding at the site. One evening it was decided, largely with Steve's urging, to arrange a session to create a photographic index of all the specimens collected to date. The name "Track Meet" was coined in emails between Steve and Ron Buta, a BPS member who is an astronomer at the University of Alabama. Steve largely organized the first Track Meet, held on August 19, 2000 at the Alabama Museum of Natural History, even arranging speakers. The roster included professional geologists and paleontologists from the Geological Survey of Alabama Museum and Emory University. These same professionals, including Andrew K. Rindsberg and Tony Martin, were instrumental to the effort to document and protect the mine. If it had not been for their initial professional opinions as to the tracks' significance, it is unlikely the amateurs would have gotten as far as they did.

The goal of the first Track Meet was to systematize and preserve the specimens so that they would not become casualties of site reclamation and the vicissitudes of the lives of amateur collectors. Ron took most of the photographs at this and the following three Track Meets which have been held to date. He placed digitized images of all the photos of the specimens on a website together with documentation regarding the collector, tentative identification of the specimen, and other pertinent data. As he had with BPS field trips in the past, Ron also began to document a rough history of events and publications related to these early activities at the Union Chapel Mine. The website's value to the preservation effort was serendipitous but crucial: *The instant availability of all these images via the internet to distant scientists, governmental officials, and media representatives turned out to be a key advantage when the decision was made the next summer to push for permanent protection for the site.* The intrinsic value of the discovery was of equal importance: *Its position at the beginning of the colonization of land by reptiles made it more important than ever to try and preserve the site for future research.* Even by the time of the first Track Meet, specimens recording some of the earliest known examples of specific animal behavior (such as schooling behavior; Martin and Pyenson, 2005) had already been found. The large number of well-preserved specimens allowed some exciting preliminary results on population dynamics.



FIGURE 1. Fossils found by BPS members who attended the first organized outing to the Union Chapel Mine on January 23, 2000. At left is a fine vertebrate trackway (UCM 125, tracks 1-2 cm in size) while at right is a beautiful arborescent lycopod bark impression. Photo credits: Larry A. Herr and Ron Buta

On October 14, 2000, a second Track Meet was held at the Oneonta High School, where Ashley was a science teacher. The event was, again, well attended, and hundreds more specimens were photographed. The weather was warm and sunny, and many of the tracks were laid out on the lawn after photography so that the ichnologists, Andy Rindsberg from the Geological Survey of Alabama (GSA) and Tony Martin and Nick Pyenson from Emory University, could go over them. They systematically moved through the array of slabs, picking them up and viewing them in various orientations in the rays of the sun to highlight the trace fossils on the surface.

During the summer and fall of 2000-2001, with over 1000 catalogued trackways in the database, some of them representing apparently undescribed ichnospecies, the BPS and its professional advisors at the GSA began to make plans for producing a monograph to lay out in detail all aspects of this unique site. By the time the third Track Meet was held on May 12, 2001, plans for the monograph were well underway. A "Great Track Layout" (GTL) was held on July 27, 2001 at the Alabama Museum of Natural History where the structure of the monograph was discussed and outlined (Fig. 2). In addition to original research papers, and papers concerning the discovery, documentation, and significance of the site, the monograph would include extensive atlas sections illustrating a selected subset of all the trackways found. For the atlas sections, all the photographs were laid out on large tables for inspection by professional ichnologists, and about 100 of the best were selected for inclusion. (Some of these are contained in the current atlases in Haubold et al., 2005 and Buta et al., 2005, but since these were produced more than 3 years later, they also include more recently collected specimens.) Even before the GTL, the BPS had contacted two paleobotanists, David Dilcher of the University of Florida and Brian Axsmith of the University of South Alabama, to write an article on the abundant and di-

verse fossil plants found at the Union Chapel Mine. (Coworker Terry A. Lott later contributed to this article.) David Dilcher made the long drive to Anniston for the third Track Meet and spent hours photographing plants for what would be a lavishly illustrated chapter on the diverse paleoflora from the mine (Dilcher et al., 2005).

It was early in the summer of 2001 when the daunting decision was made to mount a campaign to somehow stop the inevitable reclamation of the Union Chapel Mine. As Prescott Atkinson remembers:

I was out at the Union Chapel Mine site with Steve Minkin one sunny weekend day. It was pretty much just the two of us, and we had a great morning finding several slabs with the distinctive tracks of *Cincosaurus cobbi*, the most abundant vertebrate traces found at the site. The day was hot but not the furnace-like heat of mid-summer, which we had already discovered necessitated starting the day near dawn and leaving at midday. We were relaxing back at the cars, having some water and looking over our finds from the morning when Steve looked up at me and said, "We can't let this place go down without a fight. We've got to somehow get it preserved." His words crystallized a feeling that had been growing in me and other members of the group. We determined then and there that we had to get busy if we were serious. We knew that the hour was late. We had no idea how long the Surface Mining Commission in Jasper would permit the company to delay reclamation; it could start at any time.

In the fall of 2001, Ron traveled to South Africa to carry out a research collaboration with an astronomical colleague at the University of the Witwatersrand in Johannesburg. While there, he was able to visit the Bernard Price Institute for Paleontological Research on the same campus, and view some of the Institute's astounding Permian-Triassic vertebrate fossil collection from the Karoo Basin of South Africa. It was also there, ironi-



FIGURE 2. Several attendees at the “Great Track Layout” of 2001: (top left to right) Jim Lacefield, Ron Buta, Andy Rindsberg; (middle left to right) Bruce Relihan, Sam Hood, Nick Pyenson; (bottom left to right) Ashley Allen, Kathy Twieg, Steve Minkin. Photo credit: Deborah Crocker

cally enough, that he learned of a bulletin published by the New Mexico Museum of Natural History detailing an extensive set of Permian track sites in the Robledo Mountains near Las Cruces. In the late 1980s, a lone amateur named Jerry MacDonald had almost single-handedly brought the sites to the attention of professional paleontologists around the country and eventually had won the protection of the sites by the Federal Bureau of Land Management, which owned most of the localities. In an almost superhuman feat of endurance, Jerry had carried huge slabs of redbed sandstone strapped to his back over half a mile of rugged terrain, placed them in a truck, and reassembled them at his home. Many of these important trackways now reside in the collections of major museums across the country. Jerry recounted his experiences in a book, *Earth’s First Steps: Tracking Life Before the Dinosaurs* (MacDonald, 1994), one of the greatest testaments to citizen science ever published. In his book, Jerry mentioned the influence the Aldrich and Jones paper had on his interest in seeking the source of fossil trackways in New Mexico, which up to 1987 had turned up mainly in private amateur collections, mysterious museum displays, and even in a restaurant and a local home. Jerry’s book turned out to be a sort of roadmap for us, showing us at least some of the first steps we needed to take in our campaign to preserve an equally important site that predated the New Mexico Permian sites by 30 million years.

As we moved toward preserving the site, obviously we needed the support of the owner, in this case the New Acton Coal Mining Company. Any attempt to obtain the property without the cooperation of the company would probably be doomed. We needed support from professionals in the field to justify the need for preservation on a scientific basis; this was best obtained in the form of letters which could then be posted on Ron’s website. We needed media attention to broadcast our campaign to save the site as widely as possible and to help gather support from nearby residents as well as scientists in other regions of the country and the world.



FIGURE 3. A group of BPS members meets with company representative Dennis Reid to discuss the early stages of the preservation effort. Left to right: Ashley Allen, Bruce Relihan, Steve Minkin, Prescott Atkinson, Kathy Twieg, Dennis Reid, Ken Hoyle, Don McDonald. Photo credit: Ron Buta

Finally, we needed the support of local, state, and national governmental officials to find some way around the seemingly insurmountable obstacle posed by the Surface Mining Control and Reclamation Act. The hurdle was significant, because no coal mine had ever been left unreclaimed to protect a fossil site before.

Fortunately, we had a good relationship with the mining company. In July 2001, we met with a company official to make known our newly-formed intention to fight for preservation of the site and to try to ascertain what kind of support we could expect (Fig. 3). The company representative, Dennis Reid, a relative of the owner Dolores Reid, was cautiously supportive. An unspoken but obvious advantage for the company lay in our efforts. If we were successful, the company might avoid tens of thousands of dollars in reclamation costs. At the same time, the company was anxious to avoid any appearance of conspiring to evade their responsibility to reclaim the mine. It should be stated here, in no uncertain terms, that the company always played a passive, though supportive, role in our campaign. In the end, after a lobbying effort that took four years, legal fees and payments to a local landowner who controlled an option to buy the site may have nearly equalled the amount of money the company saved in reclamation costs.

In September 2001, a delegation from the BPS met with Randy Johnson, the Alabama Surface Mining Commissioner, and the Commission’s attorney Milton McCarthy at the SMC office in Jasper (Fig. 4). BPS members included club President Kathy Twieg, James Lowery, Steve, Ron, and Prescott. Andy Rindsberg was also there representing the Geological Survey of Alabama. They presented the Commissioner with a loose-leaf notebook filled with letters of support, clippings, and photographs that had been put together by Kathy. Kathy made several of these notebooks, which were a very useful way to present our case to officials. Amazingly, during the course of the meeting with the Commissioner, it became clear that no one seemed to know exactly how to go about exempting the site from reclamation. As we have noted, it had never been done before for scientific purposes. Although the Commissioner, who has a PhD in biology, recognized the significance



FIGURE 4. Meeting at the Alabama Surface Mining Commission, September 18, 2001. *Left to right:* Ron Buta, Kathy Twieg, Milton McCarthy (lawyer for Commission), Prescott Atkinson, Randy Johnson (Director, Alabama Surface Mining Commission), Billy Orick (Permits Manager, New Acton Coal Mining Company), Wendy Allen Jackson (Director of Land Acquisition, Black Warrior-Cahaba Rivers Land Trust), unidentified (commission official), Steve Minkin, Andy Rindsberg.

of the site and was sympathetic, he made it clear that he could do no more under the law than grant the company a little more time before they had to begin reclaiming the site. He indicated that in the search for a way out of the reclamation requirement, our steps would have to pass through Washington, DC, since the legislation mandating reclamation was a federal law.

Early in the campaign, the BPS members began to attract the attention of the press and articles began to appear, often centered around the Track Meets, detailing the remarkable fossils from the site and the problem posed by the impending reclamation. Steve, Prescott, and Bruce Relihan, another BPS member, met with Ed Howell, a reporter from the Jasper *Daily Mountain Eagle*, and showed him examples of the splendid tracks that were coming from the site in a display that covered a dozen tables. Ed's interest in the campaign as well as that of other reporters at local and regional newspapers was to play a key role in attracting local support for the effort to preserve the mine. In addition, to further spread the fame of the Union Chapel Mine trackways, Steve helped to prepare trackway displays at local museums, including the Anniston Museum of Natural History in Anniston, Alabama, and the Colburn Gem and Mineral Museum in Asheville, North Carolina. The latter museum carried, from March 16 to May 9, 2002, an exhibit titled "Tracks Through Time."

Another early strategy which the members employed was to involve conservation groups in the preservation effort. The enactment of the Surface Mining Control and Reclamation Act had not occurred without good reason. A large number of abandoned surface coal mines still litter the landscape of states in which the coal mining industry had been active, an unpleasant reminder of how necessary the legislation had been. The BPS wanted to make sure that there were no serious objections from an environmental standpoint. Fortunately, the track-bearing part of the Union Chapel Mine was a fairly small site, covering a total of 32 acres with only a small percentage of that representing unreclaimed spoil piles along a highwall about 150 yards in length. It did not lie close

to any bodies of water that might be contaminated by runoff. The highwall, which represents the point at which the excavation by the company stopped, is about 100 feet high, and the presence of this feature constituted both a potentially important scientific resource as well as a significant liability. It was the liability posed by the high wall that made the search for an organization that could accept custody of the site the most difficult aspect of its preservation. No small private organization could consider taking on the long-term risk that it represented without adequate insurance coverage. The potential scientific importance of this feature is also one of the most exciting aspects of the site. Buried beneath 75 feet of gray shale, interbedded shale and sandstone, and sandstone, and above the Mary Lee coal seam, lie layers of thin-bedded track-bearing shale (Pashin, 2005), more fragile than bone china, on which are inscribed traces of creatures long gone from the earth. These layers represent a potential gold mine of scientific information that may be the site of a controlled excavation sometime in the future if funding can be obtained.

As an initial move to assess the attitude of local environmentalists regarding the preservation of a valuable fossil site that happened to be located in a surface coal mine, Prescott made a presentation to Wendy Allen Jackson, the Director of the Black Warrior-Cahaba Rivers Land Trust, a local conservation group, at their Birmingham office. Wendy was immediately supportive and brought the matter up before the Board of the Land Trust, which was favorably impressed and even seriously considered offering to take temporary custody of the site. As an example of the depth of her interest in the project, Wendy even took the time to visit the site one weekend. On another occasion, Prescott and Steve met with Pete Conroy, another prominent Alabama conservationist, at Jacksonville State University and found him very supportive as well. Another conservation organization that proved very supportive of the campaign to preserve the mine was Cahaba-Warrior-Coosa Resource Conservation & Development (CaWaCo), an organization involved in ecologically sound land development and con-



FIGURE 5. April 24, 2002 meeting between Jerry MacDonald and members of the BPS and the Geological Survey of Alabama. *Left to right:* Prescott Atkinson, Jerry MacDonald, Jim Lacefield, David Kopaska-Merkel, Andy Rindsberg, Jack Pashin, Vicki Lais, Kathy Twieg, Richard Blake, Ron Buta. Photo credit: Pearl MacDonald.

servation in the watersheds of these three rivers in Walker, Shelby, Blount, Jefferson, and Chilton Counties. Paul Kennedy, the CaWaCo Project Coordinator, was especially interested, visiting the site on several occasions and even assisting in a site visit by the entire CaWaCo Board on one occasion. The support of these local environmental groups was essential to the ultimate success of the campaign; a failure to involve them and to explain the importance of the site to science might have resulted in inadvertent misunderstanding and opposition that could have crippled the preservation effort.

In April 2002, Jerry MacDonald and his wife, Pearl, made the long drive east to Birmingham from Las Cruces, New Mexico, on invitation from Ron representing the BPS (Fig. 5). Jerry spoke to the group both at one of their monthly meetings and at a reception hosted by Ron and his wife, Deb Crocker, at their home. Jerry also was able to visit the Union Chapel Mine site and see the area for himself despite health problems which were making it increasingly more difficult for him to walk long distances. Galvanized by Jerry's visit, Ron, Steve, and Prescott began to make a series of visits to local, state, and federal governmental officials to present the case for preservation. These included the staff in the Jasper office of the District 4 Congressman, Robert Aderholt, on May 25, 2002, and Bruce Hamrick, the Walker County Commissioner, on October 8, 2002. Ron had made a series of poster-sized photographic enlargements of tracks and plant impressions that helped a great deal in these sessions. Both of these officials offered their support in the effort. Later, Steve, Ron, and Prescott met with the Jasper Kiwanis Club to make a presentation, which was warmly received. The presence of a world-class fossil site in their back yard promised publicity and tourism, both welcomed in an area whose major traditional industry, coal mining, was in decline.

In July 2002, Congressman Aderholt made a site

visit to the Union Chapel Mine (Fig. 6). Under a blistering Alabama summer sun, he inspected a display of fossils from the site and looked at Ron's spectacular posters arranged as a backdrop for the tables. Several members of the BPS and the GSA made presentations to demonstrate to Mr. Aderholt how unusual the Union Chapel Mine fossils were and what a tragedy it would be if the site were reclaimed. The congressman was impressed with the depth of the scientific material and gave the preservation effort his support. In collaboration with the BPS, his staff submitted a bill entitled *The Union Chapel Fossil Footprint Site Preservation Act* under his sponsorship during the 1st Session of the 108th Congress. The bill was designed to exempt the site from the reclamation requirements and transfer it to the protection of a governmental agency, namely the Department of the Interior.

In September 2002, Kathy Twieg, the BPS President, and James Lowery, the Vice President, filed papers with the State incorporating both the BPS and a new, nonprofit corporation designated the Alabama Paleontological Society, Inc. (APS). The achievement of nonprofit status meant that the new 501(c)(3) organization, as an outgrowth of the former BPS, could potentially serve as a means to accept tax deductible donations for the educational purposes to which it was dedicated. This step simplified a financial problem that arose during the last days before the site was transferred to the State, which is described in some detail below.

In February 2003, the APS hosted Hartmut Haubold, Director of the Institute of Geological Sciences and Geiseltalmuseum, Martin-Luther-University, Halle-Wittenberg, Germany. Dr. Haubold is one of the most respected vertebrate ichnologists in the world. He spent two weeks looking at specimens that he had carefully catalogued from Ron Buta's website from his office in Halle, Germany. Dr. Haubold's evaluation of the importance of the site was a key element in the letters of



FIGURE 6. Congressman Robert Aderholt (left) listens to Andy Rindsberg discuss the remarkable finds from the Union Chapel Mine, during a site visit in July, 2002. Photo credit: Prescott Atkinson.

support from professional paleontologists that served to convince members of the press and governmental officials of the importance of the site. It is worth reproducing in part here: “My assessment: by quantity, by quality, and by geologic age, it is the most important discovery of Carboniferous tracks hitherto known.” He subsequently consented to contribute to the monograph a scholarly article with his analysis of the vertebrate trackways. Hartmut stayed in the homes of several of the APS members studying the tracks in their collections, and he spent a day at the site. He gave a talk at one of the APS monthly meetings and was hosted at a special dinner held at the home of Steve and Missy Minkin.

On May 3, 2003, the Geological Survey of Alabama hosted a workshop organized by Andy Rindsberg, Ed Hooks, David Kopaska-Merkel, Tony Martin, and others dedicated to the study of the fossils of the Union Chapel Mine (Fig. 7). The workshop was attended by paleontologists from all over the Southeast and even as far away as Birmingham, England. Adrian Hunt and Spencer Lucas flew in from the New Mexico Museum of Natural History in Albuquerque. Spencer, the New Mexico State Paleontologist, had been a very helpful supporter of the campaign, providing a letter of support as well as contacts in the Department of the Interior which was being considered by the APS as a possible governmental entity that could accept custody of the site. There was an organized program of lectures on all aspects of the Union Chapel Mine fossils (Martin, 2003), and classroom tables filled with specimens for examination. At times the discussions following the lectures became quite spirited when various controversial aspects of the trace fossils were considered. The workshop culminated with a site visit by the attendees at which they were able to see the mine for themselves and to collect samples.

In June 2003, two important events occurred. On



FIGURE 7. (Top) Logo used for the Workshop on Permo-Carboniferous Ichnology, held at the Alabama Museum of Natural History, May 2-4, 2003. Designed by Ron Buta and Deborah Crocker. (Bottom) Lauren Tucker, University of Birmingham, UK, speaks on the composition of early tetrapod communities at the Workshop.

Thursday, June 19, the monthly meeting of the Alabama Surface Mining Commission included a presentation by Prescott on the urgent need to preserve the Union Chapel Mine, an update on progress that was occurring to that end including the bill introduced by Congressman Aderholt, and a plea for more time so that the bill could move through Congress. On Tuesday June 24th, the site was visited by Randy Johnson, the Surface Mining Commissioner, Nick Tew, the newly appointed State Geologist and head of the Geological Survey of Alabama, and Jim Griggs (Fig. 8), the Director of the State Lands Division of the Alabama Department of Conservation and Natural Resources. Billy Orick, the permit manager from the New Acton Coal Mining Company was also in attendance as well as Prescott and Ron.

It was a sunny morning, and the group walked around the site finding several nice sets of tracks during the excursion. Afterwards they met at Uncle Mort's, a nearby restaurant, to discuss the possibility of preserv-

ing the site and the steps that would have to be taken. The APS had come to realize that an essential component of the preservation effort had to be a governmental agency that could accept it in perpetuity. Although the U.S. Department of the Interior had been considered, the most logical agency was the Alabama State Department of Conservation and Natural Resources, and so it was fortunate that Jim Griggs had been impressed by what he had seen at the site. He was a former attorney for the Geological Survey of Alabama and had a particular appreciation for the unique nature of the Union Chapel Mine fossils. What he could do towards preserving the site was unclear to those outside his office, but seeds had been planted that day that eventually bore fruit.

In late July 2003, the New Acton Coal Mining Company received a letter from the Surface Mining Commission informing them that time had run out and that reclamation must begin immediately. Billy Orick telephoned Prescott to inform him that APS access to the site was being withdrawn and that bulldozers would begin reclamation the following week. Although the company filed an appeal, all seemed lost. The attorneys agreed that an appeal might slow the order for reclamation but eventually would be denied because the law was clear. Prescott sent out a desperate email to everyone who had ever been involved in the preservation effort informing them of the end of the campaign but not really expecting anyone to offer any ideas for a last minute reprieve.

It was at this dismal point that Andy Rindsberg did something that galvanized the press, and they came riding in to the rescue. Everyone loves to read about an impending disaster — even on such a miniature scale — and the press took real notice of what was happening. When Andy put a notice of the impending doom of the fabulous fossil site on the Paleonet, Vertebrate Paleo, and Skolithos listservs, suddenly calls began coming in from big news organizations. It turned out that many of the bigger news media groups were monitoring the paleontology listservs for interesting news items. *USA Today* ran two stories, one quite extensive. *Science*, the premier scientific journal in America, ran a story in its *News and Views* section. *Geotimes*, the magazine published by the American Geological Institute, also ran an article. Perhaps the most helpful was a series of three front page articles by Ed Howell in the Jasper paper, *The Daily Mountain Eagle*. These voices, together with other articles and editorials in *The Birmingham News*, *The Huntsville Times*, and *The Tuscaloosa News*, won us a reprieve. In its August meeting, which also was attended by representatives from the County Commissioner's office and the Jasper office of Congressman Aderholt, the Surface Mining Commission decided that reclamation could be placed on hold until the company's appeal could be reviewed by an attorney from the Surface Mining Office in Birmingham.

On February 14, 2004, on a beautiful Saturday morning, Prescott and Steve visited the Union Chapel Mine for a morning of collecting. The fate of the mine was still unclear, but the two decided to enjoy what might be one of the last days collecting there. Although the

day was predicted to have showers, it was surprisingly sunny, and they passed a magical morning finding some spectacular trackways in the bright slanting winter rays of the sun. They also met with John Southard, the local neighboring landowner, and chatted at length with him at his breakfast table about the secrets of making homemade sauerkraut, and he sent them home with gifts from his pantry of home-canned vegetables. In less than a week, Steve suffered a fatal fall in his home in Anniston. At the time of his death, he had been busily planning a trip to Albuquerque to take Spencer Lucas a large sample of Union Chapel Mine fossils, a donation that he felt would spread the fame of the Union Chapel fossils far and wide. Steve's energy and imagination had been a driving force in the preservation effort, and the loss of his friendly smile and intellectual vigor was a shattering blow to his friends in the APS.

During the next three months, the machinery of the Department of Conservation and Natural Resources that had been set in motion by Jim Griggs, the Director of the State Lands Division, began to play a role in the gathering momentum to preserve the site. Over the months since he had visited the site, Mr. Griggs had quietly put in place the needed funds to assure eventual reclamation if the pending legislation failed to pass. In the spring of 2004, a meeting was convened at the Surface Mining Commission's office in Jasper. Present were the Surface Mining Commission's attorney Milton McCarthy, Prescott Atkinson representing the APS, company officials and their attorney, and the State Lands Division attorney. The State Lands Division agreed to take the site under its protection. However, a potential deal-killing complication had arisen. Before the BPS had made its intentions clear regarding a preservation effort, Mrs. Reid, the original owner of the New Acton Coal Mining Company, had signed a contract with a local land owner, to sell him the property after reclamation. It was agreed that some way to purchase his rights to the land would have to be found in order for the transfer to the State to take place. A lengthy series of negotiations ensued over the next three months, and eventually the landowner agreed to sell his rights to purchase the property for \$30,000. The purchase price was divided equally among the Company, the State, and private donations, which Prescott agreed to raise.

So it was that on June 18, 2004, the property known as the Union Chapel Mine passed into the keeping of the State of Alabama. A camel had been successfully passed through the eye of a needle. The book would not close on the Union Chapel Mine fossils. A new chapter, the first of many, had begun.

Addendum: In late July 2004, in honor of Steve's planned trip to New Mexico, Ron and Prescott drove a rental truck loaded with almost 200 Union Chapel Mine trackways, all duly photographed and indexed, as a donation to the New Mexico Museum of Natural History where the specimens joined the largest Permian trackway collection in North America and would serve as a resource for visiting scholars from around the world. This is only a small fraction of the specimens donated to museums by the collectors. Three large collections have also been established in Alabama, based on donations



FIGURE 8. Jim Griggs (right), Director of the State Lands Division of the Alabama Department of Conservation and Natural Resources, and Prescott Atkinson pose before the dedication ceremony for the Steven C. Minkin Paleozoic Footprint Site. Photo credit: Ron Buta.

by Steve and others to the Alabama Museum of Natural History, the Anniston Museum of Natural History, and the McWane Science Center in Birmingham, Alabama. On March 12, 2005 the State Lands Division of the Alabama Department of Conservation and Natural Resources formally dedicated the Union Chapel Mine as the *Steven C. Minkin Paleozoic Footprint Site* (Figs. 8, 9).

ACKNOWLEDGMENTS

The APS is grateful to all those who helped make the preservation of the Union Chapel Mine a success: Congressman Robert Aderholt, Claire Bourne, Pete Conroy, Jim Griggs, Bruce Hamrick, Bill Harris, Hartmut Haubold, Ed Hooks, Ed Howell, Paul Housel, Wendy Allen Jackson, Randy Johnson, Paul Kennedy, James Lowery, Spencer Lucas, Jerry and Pearl MacDonald, Tony Martin, Milton McCarthy, Billy Orick, Nick Pyenson, Dennis Reid, Dolores Reid, Andrew K. Rindsberg, Berry H. (Nick) Tew, and Kathy Twieg. The following Institutions helped to preserve the site: the Alabama Museum of Natural History, the Anniston Museum of Natural History, the Geological Survey of Alabama, the Alabama Surface Mining Commission, and the Alabama Department of Conservation and Natural Resources. The APS is also grateful to all the trackway collectors who came together for the track meets and made the database available to the world. The authors wish to thank James Lowery, Rita Lueth and Andrew K. Rindsberg for their critical readings of the manuscript, and Andrew K. Rindsberg for a prelimi-

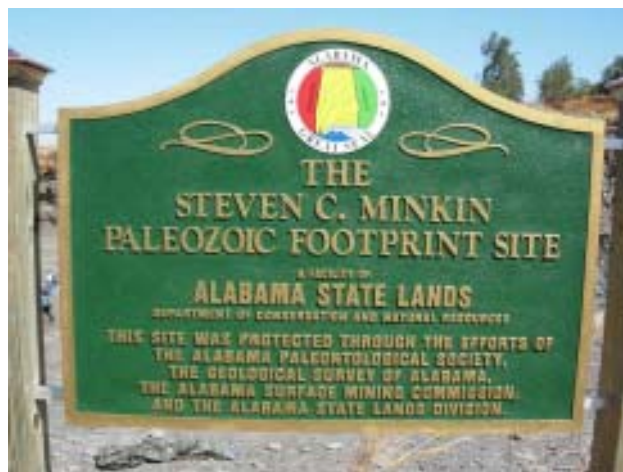


FIGURE 9. The sign dedicating the Union Chapel Mine as the Minkin Paleozoic Footprint Site, erected March 12, 2005. Photo credit: Ron Buta.

nary compilation of Union Chapel Mine articles.

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