

**DR. SPENCER LUCAS**

**WRITTEN RESPONSES ON ALLEGATION**

**SUGGESTIONS TO IMPROVE THE NMNHS**

**BULLETIN**

## ON PARKER'S ACCUSATION OF "CLAIM JUMP"

A series of letters written by William Parker of the Petrified Forest National Park in Arizona and other letters written by Jeffrey Martz, Matthew Wedel and Michael Taylor (hereafter Martz et al.) accuse research staff at the New Mexico Museum of Natural History and Science (hereafter NMMNH) of rushing to publish an article that named a new kind of aetosaur in order to "claim jump" or "scoop" Parker, who had an article in press proposing a new name for the same aetosaur. The individuals accused are Spencer Lucas, Interim Executive Director; Adrian Hunt, former Executive Director; and Justin Spielmann, Geosciences Collections Manager and Registrar (hereafter referred to as Lucas, Hunt and Spielmann).

The article in question is: Lucas, S. G., Hunt, A. P. and Spielmann, J. A., 2006, *Rioarribasuchus*, a new name for an aetosaur from the Upper Triassic of north-central New Mexico: New Mexico Museum of Natural History and Science Bulletin 37, p. 581-582. Hereafter this article will be referred to as Lucas et al. This article was based on fossils collected by NMMNH personnel and prepared and repositied in the NMMNH collection.

The chief claim of Parker and Martz et al. is that Lucas, Hunt and Spielmann knew Parker had a paper in press that named a new genus of aetosaur and decided to beat him to print by publishing their own name for the same aetosaur in the NMMNH Bulletin, a publishing outlet that has a much quicker editorial and publishing process. Both the Parker and Martz et al. letters have similar content, including a number of assumptions and accusations against Lucas, Hunt and Spielmann.

The key accusations and assumptions are:

- That Lucas, Hunt and Spielmann knew that Parker intended to provide a new name for *Desmotosuchus chamaensis* and that they had knowledge of Parker's forthcoming paper due to his published abstracts in which he demonstrated that *Desmotosuchus chamaensis* was going to be given a new name in a future publication.
- That the paper by Lucas et al. was not extensively peer reviewed, as if it had been, then Parker's intentions to name a new genus would have been made clear to Lucas et al. by the reviewers.
- That with this knowledge, Lucas, Hunt and Spielmann fast-tracked a paper to beat Parker to naming a new genus.
- That Lucas, Hunt and Spielmann's renaming of the material was not based on independent research.
- That Parker had full permission and rights to examine, photograph, describe and

publish on the aetosaur material in the NMMNH collection.

However, to address every accusation made in Parker's letter, we will answer every allegation and all statements that we consider to be false or ambiguous in the order in which he presents them.

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## RESPONSE

First, we should clarify the background of the Lucas et al. (2006) paper as well as other relevant factors.

In late December of 2006, the Lucas et al. article titled "*Rioarribasuchus*, a new name for an aetosaur from the Upper Triassic of North-Central New Mexico" was published in NMMNH Bulletin #37. This article was written by NMMNH scientists about fossils NMMNH collected, prepared and has repositied in its collections.

Previously, *Rioarribasuchus* was called *Desmotosuchus chamaensis*, a name given by Zeigler, Heckert and Lucas (hereafter Zeigler et al.) in a paper published in a NMMNH Bulletin in 2002. Please note that Parker erroneously references its publication date as 2003.

Indeed, the review process of NMMNH Bulletin 37 was the one also used by other publications, such as the New Mexico Geological Society, American Museum of Natural History and Indiana University Press. In other words, authors were asked to seek two reviews of their paper, to revise in light of these reviews, and submit the revised manuscript with the review.

In 2007, Parker published an article in The Journal of Systematic Paleontology naming the same aetosaur *Heliocanthus*. Parker's paper is almost entirely based on NMMNH fossils collected at the Snyder Quarry, a site that NMMNH continues to excavate and study. We did not know that Parker had written this paper, submitted it to a journal and that it was in press simply because neither he nor anybody else informed us of his paper's existence. Furthermore, we did not suspect he would write a paper on fossils he knew us to be actively studying without contacting us first.

Parker (2007) appeared online in January 2007, but was not actually published until March 2007. So, Parker's statement that his paper was released one week after Lucas et al. is technically correct, as the two papers were actually published about four months apart.

As per Parker's telling:

**1. "Shortly after the New Mexico Bulletin was released I contacted Dr. Lucas and asked him about his article: he replied that the *Rioarribasuchus* paper is based on his independent discovery that the fossil belonged to a new genus rather than the genus *Desmotosuchus*."**

In January 2007, shortly after NMMNH Bulletin 37 was released, Parker indeed contacted Lucas by telephone. However, the conversation between Parker and Lucas was not about what Parker claims. Rather, the conversation was about the actual publication dates of Lucas et al. and of Parker's soon to be published paper and our mutual surprise about the existence of both papers.

After the January conversation between Lucas and Parker, Lucas heard nothing more about this until April, when Darren Naish's defamatory blog (see attached) was brought to the attention of Hunt and Lucas.

**2. "When I notified him of my impending paper he claimed that he had no knowledge that I intended to provide a new name for this animal."**

This is not true. What was really said by Lucas was that he and his co-authors (Hunt and Spielmann) were unaware that Parker had written an article proposing a new genus name, much as Parker was unaware of our paper. In reality, the conversation ended on a conciliatory note. Parker and Lucas were both surprised that the other had written an article naming the aetosaur and that the two articles were published very close together in time. Indeed, had Parker's article appeared first, Lucas, Hunt and Spielmann would have been disappointed, but would have conceded that Parker's name had priority.

In his letter, Parker goes on to give the several reasons why he found Lucas' comments disturbing based entirely on what he says was discussed during their conversation, which again, is not accurate. Nonetheless, we will continue to discuss Parker's observations in detail:

**3. "After the first *Desmotosuchus chamaensis* paper was published in the Spring of 2003 by Dr. Lucas and colleagues I visited the NMMNHS museum collections and examined the material first hand."**

Parker claims that in the Spring of 2003 he visited the NMMNH collection. However, the NMMNH collection visitor log indicates that Parker visited the collection on 23 February 2001 and on 30 May 2002. At that time, he was working on his master's thesis on a large aetosaur skeleton from Arizona in the collection of the Museum of Northern Arizona. Parker visited the collection again in 2006 and 2007, as recorded in the visitor log. However, there is no record of Parker visiting the NMMNH collection in Spring 2003.

**4. [During his alleged NMMNH visit in the Spring of 2003] “I discussed with several of the staff that I did not feel that the specimens belonged to *Desmotosuchus* but instead were more like an animal called *Paratypothorax*.”**

Who are the NMMNH staff members with whom he discussed this? Lucas, Hunt and Spielmann were never informed of these supposed conversations. Also, if in fact true, this also suggests that Parker may have considered *Desmotosuchus chamaensis* to belong to *Paratypothorax*. But again, the real question is “who” exactly did he talk to? It certainly was not Lucas, Hunt or Spielmann.

**5. “A few months later, Dr. Andrew Heckert (then collections manager of the NMMNH&S), Lucas, and colleagues released another paper in a NMMNH&S Bulletin that repeated the claims that the specimens represented *Desmotosuchus*.”**

As Parker indicates, a few months later after his putative visit, Heckert, Zeigler and Lucas published another paper in a NMMNH Bulletin, and, at that time, Heckert et al. still assigned the aetosaur material to *Desmotosuchus chamaensis*. This further demonstrates that NMMNH staff continued to research and publish on Snyder Quarry fossils.

**6. “In my Master[s] Thesis completed in December 2003 I referred the specimens in question to a new genus which I named *Heliocanthus*.”**

That may be the case, but Lucas, Hunt and Spielmann do not have a copy of Parker’s masters thesis and have never read it. See response 7 below for further discussion.

**7. “Dr. Heckert and other staff at NMMNH&S were notified of the release of my thesis and sent a copy for their library.”**

While Parker may have had communication with Heckert and perhaps even sent a copy of his thesis to Heckert, a thorough examination of the Collection library of the NMMNH, as well as the extensive reprint library of Lucas, reveals that the NMMNH does not have a copy of Parker’s thesis, either electronically or as a hard copy.

It is possible that Heckert took his copy of Parker’s thesis with him when he left to take a teaching position at Appalachian State University in July of 2005. In which case, Heckert was the only one to have had a copy of Parker’s thesis, a document that was never circulated to the rest of the researchers in the NMMNH Geoscience Department.

Based on the lack of any of the authors of Lucas et al. (2006) having a copy of Parker’s thesis and no indication of a forthcoming name from Parker in any of his subsequent articles (see below), there was no way for any of the NMMNH staff involved

to have known Parker's intention to publish his name.

**8. "I also published an abstract in the Journal of Vertebrate Paleontology (to which Dr. Lucas subscribes) and gave a talk at the Annual Meeting of Society of Vertebrate Paleontology in late 2003 where I noted that *Desmotosuchus chamaensis* represented a new genus."**

Parker infers that because Lucas, Hunt and Spielmann subscribe to the Journal of Vertebrate Paleontology they must have read his abstract (2003). Assuming that indeed Lucas, Hunt and Spielmann read the abstract, Parker's abstract simply "notes" that *Desmotosuchus chamaensis* represented a new genus. There is no indication in Parker's abstract that he planned to give it a new name.

Parker also infers that because he gave a talk at the Annual Meeting of the Society of Vertebrate Paleontology, Lucas or any of his research associates were present and therefore should have presumed that his observation that *Desmotosuchus chamaensis* represented a new genus translated to his plan to give it a new name. Lucas, Hunt and Spielmann did not attend Parker's talk.

**9. "This information was also published in a second abstract in 2004 by Stocker et al. which is frequently cited by NMMNH&S staff in their publications."**

Parker's assertion leads to his and Martz et al.'s assumption that Lucas, Hunt and Spielmann had knowledge of Parker's forthcoming paper and of his intent to name it a new genus based on the publication of Parker's second abstract (Stocker et al., 2004) where once again he "notes" that *Desmotosuchus chamaensis* represented a new genus. But, again he fails to indicate that he plans to give it a new name. Furthermore, Lucas, Hunt and Spielmann have not frequently cited that abstract.

**10. "In numerous papers from 2003 through 2005 Dr. Lucas and colleagues continued to insist that the material belonged to *Desmotosuchus*."**

Parker maintains that Lucas, Hunt and Spielmann "continued to insist" that the material in question belonged to *Desmotosuchus*. In reality these are articles where Heckert is senior author. It should be noted that Heckert et al. "referred" to it as *Desmotosuchus*, but "insisted" seems too strong a word.

Again, this indicates that, at that time, Heckert et al. still assigned the aetosaur material to *Desmotosuchus chamaensis*.

**11. “In 2005 I published an invited paper in a NMMNH&S Bulletin (edited by Dr. Lucas) where I reiterated that this material belonged to a new genus. Dr. Lucas was a reviewer of that paper and his written (dated and signed 4/2/05) comment to my statement was that he did not agree with my assessment.”**

In the above proclamation, nowhere does Parker make any specific mention of his intentions to name *Desmatosuchus chamaensis* as a new genus. All Parker does, repeatedly, is to “note” that the animal represents a new genus.

Additionally, the Parker and Martz et al. letters also claim that in various publications Parker had indicated that he did not think the species *chamaensis* belongs to the genus *Desmatosuchus*, in particular by listing it as “*Desmatosuchus*” *chamaensis*.

As for the suggestion that we were aware that Parker had published notification that he was naming a new taxon, it simply is not the case.

In Parker and Irmis (2005), a publication by Parker in NMMNH Bulletin 29, a publication series he would go on to refer to derogatorily as “grey literature,” he briefly discusses *Desmatosuchus chamaensis* and that it “represents a distinct genus” (p. 50), but does not provide any further discussion or indication that he would be providing a new name for the specimen in the future.

Indeed, Lucas et al. on page 581 referenced one such publication (Parker and Irmis, 2005) to indicate agreement that it should be assigned to a different, new genus. However, the publications of Parker available to Lucas, Hunt and Spielmann when Lucas et al. was written did not indicate he was naming a new genus for *Desmatosuchus chamaensis*, but simply that he questioned its assignment to *Desmatosuchus*. Moreover, since NMMNH scientists were working on the Snyder Quarry aetosaurs, and Parker knew it, we never thought he would publish on them without first contacting us.

As for disagreement with Parker’s assessment that *Desmatosuchus* belonged to a new genus, at the time Lucas et al. continued to believe the material to represent *Desmatosuchus*.

**12. “My submitted manuscript also noted that I had a paper in preparation dealing with this problem.”**

This statement is indeed misleading. The “in press” aetosaur article mentioned in the article deals with “a new species of *Desmatosuchus*” under the *D. haplocerus* heading. No “in press” citations are under the *Desmatosuchus chamaensis* heading. The “in press” refers to an article published later on *Desmatosuchus smalli*, and has no relation to *Desmatosuchus chamaensis*.

**13. “A paper published by Drs. Heckert, Lucas and Hunt in the same bulletin acknowledged my differing opinion but still considered the material to represent *Desmatosuchus*.”**

The reason for the repeated assignment is that, at that time, Heckert et al. still assigned the aetosaur material to *Desmatosuchus chamaensis*, based primarily on the observations and conclusions of Heckert.

**14. “My manuscript renaming this material *Heliocanthus* was accepted for publication by the Journal of Systematic Paleontology on December 2, 2005 and was in press until its release the first week of January in 2007.”**

Parker’s above statement raises the question of why didn’t he simply tell Lucas et al. about the in-press article on specimens in the NMMNH collection? Parker had communicated with Lucas et al. at various times via telephone and email, so it could not have been for lack of contact information.

Moreover, Parker attended the 7<sup>th</sup> Federal Fossil Conference held in Albuquerque on 22-23 May 2006, and gave a presentation on the second day (he also visited the NMMNH collection). During this conference, Parker spoke to Lucas and Spielmann, and even though it had been over a year since his paper was submitted, and it had had been in press for about six months at that point, Parker still did not mention the upcoming article to Lucas or anyone else on the NMMNH staff.

Furthermore, in the Fall of 2006, Hunt and Lucas visited the Petrified Forest National Park to go in the field. Parker went with Lucas and Hunt and the three of them talked extensively, but he never mentioned the existence of his in-press paper.

**15. “During this time I made no secret of my intentions or the name I was providing to NMMNH&S staff.”**

Actually, even the title of Parker (2007) (“A re-analysis of *Desmatosuchus chamaensis*....”) does not explicitly indicate a renaming of *Desmatosuchus chamaensis*. The fact is that at least 6 people did not know of Parker’s paper: Lucas, Hunt, Spielmann, the two reviewers of Lucas et al. (Sullivan and Rinehart) and the principal editor of Bulletin 37 (Harris). All saw the Lucas et al. paper before it was published, and had any known of Parker’s in press paper they would have stopped publication of Lucas et al. to avoid the duplicative naming.

Parker has claimed that he told Heckert that his paper was in press, but Heckert never shared this information with Lucas, Hunt or Spielmann (note that Heckert left NMMNH for a new position in North Carolina in July 2005). We have since asked Heckert about Parker’s claims, and he denies Parker ever telling him of the paper in press. All the same, it would have been appropriate of Parker to inform the Collections



Curator, Spencer Lucas, which he did not.

**16. "The name was listed on the Petrified Forest National Park website and used in exhibits at that institution."**

Lucas, Hunt and Spielmann did not visit either website or the exhibit before 2007. And, why would Parker put an unpublished scientific name on a website or in an exhibit and create a *nomen nudum*?

**17. "Dr. Lucas' paper was released the last week of December 2006. It consists of only a few paragraphs, was not extensively peer reviewed, and cites my 2005 paper as authority for providing a new genus name for this material."**

Notice, incidentally, that the focus is on "Lucas," not on Lucas, Hunt and Spielmann. Two reviewers, Larry Rinehart of the NMMNH and Robert Sullivan, of the State Museum of Pennsylvania, Harrisburg, PA, are acknowledged by Lucas et al. (2006) for their reviews. Jerry Harris, the head editor of Bulletin 37, saw all the articles in the volume before they were published. So, when Lucas et al. went to the printer, six people (Lucas, Hunt, Spielmann, Rinehart, Sullivan and Harris) had seen it and were clearly unaware of the existence of Parker's article naming the same aetosaur.

As pointed out by the critics of the NMMNH bulletin series, peer review by qualified researchers helps to prevent duplication of effort. Collectively, Lucas, Hunt and Heckert have published many articles on aetosaurs, particularly from New Mexico and the American Southwest, in both local, national and international publications. All three are acknowledged experts on these animals, yet, curiously, Parker's (2007) paper was not sent to any of them for review. If Parker's (2007) paper had been reviewed by one of these qualified reviewers, then Parker's intention would have been known, thus avoiding the current dispute.

Lucas et al. on page 581 referenced one of Parker's publication (Parker and Irmis, 2005) to indicate agreement (not as "authority") that *Desmotosuchus chamaensis* should be assigned to a different, new genus. However, the publications of Parker available to Lucas, Hunt and Spielmann when they wrote their paper did not indicate he was naming a new genus for *Desmotosuchus chamaensis*, but simply that he questioned its assignment to *Desmotosuchus*. Moreover, since NMMNH was working on the Snyder Quarry aetosaurs, and Parker knew it, we never thought he would publish on them without first contacting us.

Nonetheless, we made a mistake in that we never explicitly told Parker not to publish on our specimens. We have always had a very liberal policy about collection access, and we assumed that Parker would respect our priority in publishing on our own specimens.

**18. “Furthermore, this was published in a NMMNH Bulletin that he co-edited, so he had the opportunity to “fast-track” the publication of his paper so that it would appear before my contribution.”**

This is simply not true. The volume in which Lucas et al. (2006) appeared (NMMNH Bulletin 37) was edited and worked on by NMMNH staff and other contributing editors/authors beginning in late 2005 and ran almost the entirety of 2006. Lucas et al. (2006) was written in July of 2006. It thus was not “fast-tracked” or given any type of preferential or special editorial treatment. Lucas et al. was a very short paper (a note simply proposing a new generic name for an already named species) so it went through review, editing and setup rather quickly, which is not unusual for a paper of that length. If at any time Parker’s work had been made known to Lucas, Hunt and Spielmann, the article would have been removed from the volume and never published.

**19. “Thus, it seems clear based on Dr. Lucas’ citing of my 2005 paper that his renaming of the material was not based on his independent discovery.”**

By early 2006, Hunt and Spielmann convinced Lucas that *Desmatosuchus chamaensis* should be assigned to a new genus. The fact is that earlier assignment to *Desmatosuchus* was a joint decision of Zeigler, Heckert and Lucas and did not involve Hunt and Spielmann. In Lucas et al., the Parker and Irmis paper was cited as an indication of agreement that the material represented a new genus. We did this to give credit to Parker for stating that *Desmatosuchus chamaensis* did not belong to *Desmatosuchus*.

**20. “Furthermore, my intent was clear and had been circulating since 2003 and was known to colleagues of Dr. Lucas; he must have known of my intent because of his comments as a reviewer of my 2005 paper.”**

Indications of future studies occur frequently in the scientific literature, e.g., Spielmann et al. (2007) in a paper on the preliminary results of a study they were later planning to expand into a monograph, simply stated in the introduction to the paper (p. 231) that “The current paper is part of a larger study being undertaken by the authors (Spielmann et al., in prep.) that will...” No such declaration was provided by Parker in any of his publications available to us prior to his 2007 article (Parker, 2007). Thus, this is nothing more than Parker’s assumption.

Indeed, if Parker had been proclaiming *Desmatosuchus chamaensis* a new genus since 2003, and our intent was to “steal” a new genus name from him, why did we wait until 2006 to do so? Actually, in 2006 we came to view *Desmatosuchus chamaensis* as a new genus, and we published a new name for it as part of our ongoing research on the aetosaurs we collected from the Snyder Quarry.

**21. "To underscore the seriousness of this situation I would like to point out that shortly after the publication of Bulletin 37 and my own paper, I was independently contacted by one of the "co-editors" of the volume who wanted to assure me that he was not directly involved with the publication of the *Rioarribasuchus* paper, wanting to dissociate himself from what could be perceived as a "claim jump"."**

Parker does not identify who told him this and why they considered it a "claim jump." Did this anonymous editor know of Parker's paper and not share that information with us?

**22. "Subsequently, another co-editor apologized for the publication of the paper in a public blog discussing the issue. Neither of these editors is affiliated with the NMMNHS."**

This was Jerry Harris, who confirmed on Naish's blog that he was unaware that Lucas et al. would duplicate Parker's naming, because Harris also was unaware of Parker's paper in press.

**23. "Finally, this is not the first time that I have encountered a similar situation with Lucas and colleagues. In 2004 I made a discovery of skeletons of an animal named *Revueltosaurus callenderi*. This animal had previously been described as an early dinosaur by Dr. Adrian Hunt in 1989 and in subsequent publications, many authored with Dr. Lucas and other NMMNH&S staff. My 2004 discovery showed that *Revueltosaurus* was not a dinosaur but rather a form of early crocodile relative. I prepared a paper with colleagues and shortly before it was published (May 2005) gave a presentation on my findings at a paleontology meeting in Utah that was attended by Drs. Lucas and Hunt. One of their colleagues, Dr. Heckert, also cited me as a reference for the discovery in one of his publications in late 2004."**

*Revueltosaurus*, named by Hunt in 1989, was a taxon discussed by various workers, including Padian and Sereno in addition to the articles Hunt, Lucas and Heckert wrote about it. Prior to 2005, *Revueltosaurus* was generally acknowledged as an early dinosaur by a majority of the vertebrate paleontological community. Parker discovered new (esp. cranial) material of *Revueltosaurus* at the Petrified Forest Park that demonstrated it was not a dinosaur.

**24. "In April 2005 Drs. Hunt and Lucas published an abstract claiming independent discovery that *Revueltosaurus* was a crocodile rather than a dinosaur and implied this again in a NMMNH&S Bulletin paper published later that year."**

The 2005 abstract and paper are solely about an NMMNH partial skeleton that was originally described in Hunt's 1994 Ph.D. dissertation as a new kind of non-dinosaurian reptile. Further preparation of this material showed that it had teeth of

*Revueltosaurus* morphology, so the abstract reported that the specimen indicated *Revueltosaurus* was not a dinosaur, but a crocodile relative.

**25. “Although my discovery was cited in the latter paper, they used their April abstract as the primary authority for this discovery and suggested that their discovery was independent of mine.”**

That is incorrect; we cited both the Parker et al paper and the Hunt and Lucas abstract to the effect that *Revueltosaurus* was a crocodile relative.

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## SUMMARY

Parker and Martz et al. claim that Parker’s intentions to publish a new name for *Desmatosuchus chamaensis* (Parker, 2007) were adequately known by Lucas and colleagues prior to the publication of Lucas et al. (2006).

We believe that the most parsimonious explanation of the facts known to us indicate that Parker went out of his way to not inform Lucas et al. of his intentions of publishing his article (Parker, 2007) on the NMMNH material despite his statements indicating the contrary. The appendix below raises worrying questions about how he obtained some of the data in his paper from the NMMNH collection. Moreover, this was material we were studying and we did not think anybody else would publish on it without first asking us, as is customary. Of course, we allowed him and others to freely study our specimens, and did not make it clear that we did not want them to publish on the Snyder Quarry aetosaurs. Again, that was our mistake.

Indeed, Parker is under the impression that we do not have the right to publish conclusions about fossils that NMMNH personnel collected, prepared, curated and described if those conclusions have also been reached by him.

In summation,

- As demonstrated above, Lucas, Hunt and Spielmann had no knowledge of the forthcoming Parker (2007) paper when they wrote Lucas et al. (2006), and no such indication was provided by Parker either verbally or via email or in writing to Lucas, Hunt or Spielmann.
- The fossils in question are NMMNH fossils and were under active study by NMMNH scientists before, during and after Parker’s visits to the NMMNH collection.

- Lucas et al. (2006) was seen by its authors, reviewers and at least one other editor prior to its publication and none of them were aware of Parker's in-press article.

Thus, Parker and Martz et al.'s criticisms of Lucas, Hunt and Spielmann are unfounded and in truth the only thing the NMMNH is guilty of is a too liberal collection-access policy and a lack of open communication with Parker.

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## APPENDIX

The underlying assumption in both the Martz et al. and Parker letters is that Parker was given complete approval to examine, photograph, describe and publish specimens housed at the NMMNH. This was not the case, but he was also not told he could not publish on the specimens. We just assumed he would not.

Specifically, fossil specimens relevant to this issue were collected from the Snyder Quarry in northern New Mexico, a site that has been excavated and researched exclusively by NMMNH staff and volunteers and continues to be excavated and researched by the NMMNH.

The NMMNH collection visitor log indicates that Parker visited the collection on 23 February 2001 and on 30 May 2002. At that time, he was working on his master's thesis on a large aetosaur skeleton from Arizona in the collection of the Museum of Northern Arizona. He was allowed to study our aetosaur collection for comparative purposes, which included many isolated armor plates from the Snyder Quarry that we were actively studying. NMMNH researchers soon published two articles on these aetosaurs (Zeigler et al., 2002; Heckert et al., 2003), assigning some of them to a new species we named *Desmotosuchus chamaensis*. Collecting at the Snyder Quarry has continued since, and more aetosaur material continues to be recovered.

In late 2004, Parker solicited Kate Zeigler, then a graduate student of Lucas and an associate of the NMMNH, to take pictures for him of some of the *Desmotosuchus chamaensis* material from the Snyder Quarry. Zeigler asked Lucas if this would be possible, but Lucas refused his permission on the grounds that the material was still under study.

At this time, Zeigler had unfettered access to the NMMNH collection and could easily have ignored Lucas' refusal and provided Parker with photographs. Though the previous sentence is conjecture, Zeigler at the time did express to Justin Spielmann, then a visiting researcher to the NMMNH, that she wanted to provide Parker with the photographs. When Parker next visited the NMMNH collection, on 22 May 2006, he was told that the Snyder Quarry aetosaurs were under study by NMMNH personnel and was not allowed to study the specimens.

In addition, Parker (2007, p. 19) acknowledges, “Randall Irmis, Sterling Nesbitt and Jeff Martz provided many of the photographs of the material [of “*Desmatosuchus chamaensis*].” This indicates that Parker solicited others for their pictures of material from the Snyder Quarry. This attempt, along with his request of Zeigler, appears to indicate that Parker attempted to procure images for publication without consulting any NMMNH staff, notably Lucas, who is in charge of the collection.

Thus, there is irony in Parker and Martz et al.’s accusations that Lucas et al. “stole” their intellectual property as it appears that Parker was obtaining information on fossils in the NMMNH collection through indirect means.

The following table demonstrates that Parker solicited photographs and data from other researchers who had visited or worked in the collection after his visit of 29 May 2002, specifically Martz, Nesbitt and Irmis, whom he acknowledges in Parker (2007) as providing photos, or Zeigler, whom he solicited for photos in mid-2004, as discussed above.

The table provides additional information for each of the NMMNH specimens listed by Parker (2007, p. 5) in his Table 1. For each entry in the table, the NMMNH specimen number is given, the date it was catalogued into the NMMNH Geoscience Paleontology Collection, whether it is referred to by Parker in Table 1 only or in additional figures (figure citations are included) and whether previous NMMNH publications (specifically Zeigler et al. 2002 or Heckert et al. 2003), photographically illustrate the specimen (figure citations are included).

In the right hand column, the Z02 and H03 refer, respectively, to Zeigler et al., 2002 and Heckert et al., 2003.

In the table:

Underlined entries are cases where Parker (2007) published photos of NMMNH material that was previously unpublished.

*Italicized entries* are cases where Parker (2007) published data on NMMNH specimens that were cataloged after his last recorded visit to the NMMNH collection in which he was permitted access to these specimens, on 5/29/02, and had not been illustrated in subsequent publications by NMMNH researchers.

**Bold entries** are cases where Parker (2007) has data on and photographs of NMMNH specimens that were cataloged after his last recorded visit to the NMMNH collection in which he was permitted access to these specimens, on 5/29/02, and had not been illustrated in subsequent publications by NMMNH researchers.

<b>NMMNH Specimen Number</b>	<b>Date catalogued by NMMNH</b>	<b>Referred to by Parker in table or figures</b>	<b>Illustrated in previous NMMNH publications</b>
4894	Not listed in catalog locality found 7/1/1986	Table only	Yes, in both Z02 fig. 2C and H03 fig. 6C
29045	2/2/1999	Both, fig. 5N	Yes, in H03 fig. 8B
31295	2/17/1999	Both, fig. 9A	Yes, Z02 fig. 2F and H03 fig. 6F
32793	9/13/2000	Both, fig. 5A-C	Yes, Z02 fig. 2D and H03 fig. 6D
32794	9/13/2000	Both, fig. 8C-D	No
32795	9/13/2000	Both, fig. 5J-L	Yes, Z02 fig. 2A-B and H03 fig. 6A-B
32796	9/13/2000	Both, fig. 10A	Yes, Z02 fig. 2G and H03 fig. 6G
32797	9/13/2000	Both, fig. 2D	Yes Z02 fig. 2E and H03 fig. 6E
33099	11/9/2000	Both, fig. 5G-I	Yes, Z02 fig. 2J and H03 fig. 6J
33100	11/9/2000	Both, fig. 5O	Yes, Z02 fig. 2K-L and H03 fig. 6K-L
33101	12/7/2000	Both, fig. 5L-M	No

33820	6/19/2001	Both, fig. 2B	Yes, H03 fig. 7B
34887	3/8/2002	Both, fig. 2A	Yes, H03 fig. 7H
34891	3/8/2002	Both, fig. 10B	Yes, H03 fig. 8E
34892	3/8/2002	Both, fig. 10C	No
35201	11/16/2001	Both, fig. 10D	No
35206	11/16/2001	Table only	Yes, H03 fig. 7D
35349	Typo, listed in NMMNH catalog as a Bryozoan		
35357	11/30/2001	Both, fig. 7A	No
35436	1/11/2002	Both, fig. 4A-B	Yes, H03 fig. 7G
35459	1/14/2001	Both, fig. 5D	Yes, H03 fig. 7F
35806	3/18/2002	Table only	No
35807	3/18/2002	Both, figs. 2C & 3A	Yes, H03 fig. 7A
35991	3/29/2002	Both, fig. 7B	Yes, H03 fig. 7C
35993	3/29/2002	Both, fig. 8A-B	Yes, H03 fig. 8A
36052	4/15/2002	Both, fig. 5E-F	Yes, H03 fig. 8F
36502	5/29/2002	Table only	No
<b>37300</b>	<b>7/31/2002</b>	<b>Both, fig. 10F</b>	<b>No</b>
37305	7/31/2002	<i>Table only</i>	<i>No</i>



37348	7/31/2002	Table only	No
37349	7/31/2002	Both, fig. 4C-D	Yes, H03 fig. 7E
39184	1/30/2003	Table only	Yes, H03 fig. 8D
39250	1/31/2003	Both, fig. 10E	No
39520	2/1/2003	Table only	Yes, H03 fig. 8C
40395	7/7/2003	Table only	No

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## ON MARTZ'S ACCUSATIONS OF PLAGIARISM

In a series of letters written to various New Mexico officials (including the Attorney General, the New Mexico Museum of Natural History and Science Executive Board, the Department of Cultural Affairs and the Office of Governor) and to the Society of Vertebrate Paleontology, Jeffrey Martz, Matthew Wedel and Michael Taylor accuse research staff at the New Mexico Museum of Natural History and Science of plagiarism. The individuals accused are Justin Spielmann, Geoscience Collections Manager and Registrar; Adrian Hunt, former Executive Director; Spencer Lucas, Interim Executive Director; and Andrew Heckert, former Geoscience Collection Manager.

The alleged plagiarism concerns this article: Spielmann, J. A., Hunt, A. P., Lucas, S. G. and Heckert, A. B., 2006, Revision of *Redondasuchus* (Archosauria: Aetosauria) from the Upper Triassic Redonda Formation, New Mexico, with description of a new species: New Mexico Museum of Natural History and Science Bulletin 37, p. 583-587. (Hereafter the article will be referred to as Spielmann et al., 2006).

This article described specimens collected by NMMNH personnel, prepared and repositied at NMMNHS, necessitating a review of the genus *Redondasuchus*. In this review, we did not ignore Martz's (2002) thesis, citing it 14 times in the text and including it in the bibliography.

*Note:* I have never met Matthew Wedel or Michael Taylor, and it is not clear why they are involved in this matter, as it has nothing to do with their work.

Jeffrey Martz, Matthew Wedel and Michael Taylor's accusations are as follows:

1. That Spielmann et al.'s (2006) paper was not submitted for peer review.
2. That Spielmann et al.'s (2006) paper provides a new review of the genus *Redondasuchus* without properly crediting Martz's (2002) thesis.
3. That Spielmann et al.'s (2006) paper contains a figure (Fig. 1) identical to the one presented by Martz (2002, Fig. 3.1) where he shows the corrected reorientation of an armor fragment of *Redondasuchus*.

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## RESPONSE

### **1. Spielmann et al.'s (2006) article was not submitted for peer review**

Martz, Wedel and Taylor assert that Spielmann et al.'s (2006) article was not

submitted for peer review. Dr. Jerry Harris, of Dixie State College, St. George, UT, and Dr. Robert Sullivan, of the State Museum of Pennsylvania, Harrisburg, PA, are listed in the acknowledgments as reviewers. Both reviewed the article, and neither detected any impropriety in the article with regard to the way it handled Martz's thesis. Both have published on Late Triassic vertebrates from the southwestern United States, thus demonstrating their expertise. This clearly would meet the criteria of a peer review of most mainstream journals.

Indeed, the review process of NMMNH Bulletin 37 was the one also used by other publications, such as the New Mexico Geological Society, American Museum of Natural History and Indiana University Press. In other words, authors were asked to seek two reviews of their paper, to revise in light of these reviews, and submit the revised manuscript with the review.

## **2. Spielmann et al.'s (2006) paper provides a new review of the genus *Redondasuchus* without properly crediting Martz's (2002) thesis)**

The relevant quote from Martz's (2002) thesis is:

"However, the edges of UCMP V6148 65415 [the type armor plate of *Redondasuchus*] are not well preserved enough to be certain which edge is medial and which is lateral (Fig. 2.3a) [**sic: should read 3.1**]; the reason why Hunt and Lucas (1991) and Heckert et al. (1996) assumed the orientation they did is not clear. However, **if the scute is instead interpreted as a right dorsal paramedian scute**, with the arching being present at the center of ossification, closer to the medial edge (Fig. 2.3.c) [**sic: should read 3.1**] it more strongly resembles the dorsal paramedian scutes of *Typothorax coccinarum* "(Martz, 2004, p. 34-35) [**boldface added by Lucas**].

We did not use Martz's text (words) or illustrations (see below). The long quote from Spielmann et al. and other technical information given below as an appendix makes it clear that there were some inconsistencies in our earlier papers on the orientation of this armor fragment, especially Heckert et al. (1996) where we called the fragment a left but actually described it in such a way that it had to be considered a right.

In 2006, Spielmann independently reached the conclusion that the armor plate was from the right side and easily convinced Hunt, Lucas and Heckert of this. Indeed, Heckert told Spielmann that this had already been evident to him for some years, partly reflected by the text in Heckert et al. (1996). Martz's conclusion regarding this, cited above, was couched in tentative terms and was intended to support his idea that *Redondasuchus* and *Typothorax* are the same kind of aetosaur (same genus).

However, Spielmann et al. neglected to cite Martz's thesis on page 584 with regard to the conclusion that the type armor plate was from the right side of the body, not

the left side. This was an oversight on our part, and this oversight is the basis of the entire accusation of plagiarism.

Unquestionably, it was not our intent to plagiarize or take undue credit for any part of Martz's (2002) thesis. As stated above, we referred to his thesis 14 times in our article and included a complete citation of it in the article bibliography. If our intent were to plagiarize his thesis, why would we have cited it and discussed various aspects of it? Indeed, failing to cite Martz on page 584 of our article was an oversight and nothing more.

**3. Spielmann et al.'s (2006) paper contains a figure (Fig. 1) identical to the one presented by Martz (2002, Fig. 3.1) where he shows the corrected reorientation of the armor fragment.**

A comparison of Figure 1 of Spielmann et al. (2006) and of Martz Figure 3.1 shows little overall resemblance. Indeed, the lower part of Figure 1 of Spielmann et al. (2006) is based on Figure 5 of Heckert et al. (1996), and this is credited in the caption. Figure 1 of Spielmann et al. (2006) is not in any way based on Martz's Figure 3.1 of his (2002) thesis. (See attached PDF comparing the figures.)

More specifically, the claim is that Spielmann et al. (2006, Fig. 1) appropriated Fig. 3.1b-c of Martz without proper citation. However, Heckert et al. (1996, Fig. 5) oriented all of the armor plates with the medial edge flat on top and the lateral edge angled out to the side. This figure by Heckert et al. (1996), and not Martz (2002), was the influence for Figure 1 of Spielmann et al. (2006) and is properly cited in the figure caption (see attached PDF). Spielmann et al. (2006) did not use any images from Martz (2002), and the inspiration for their Figure 1 came from, and indeed bears a strong resemblance to Heckert et al. (1996, Fig. 5).

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## SUMMARY

As suggested by Jeffrey Martz, Matthew Wedel and Michael Taylor in their numerous letters to the various New Mexico officials and to the Society of Vertebrate Paleontology, their suspicions of plagiarism are indeed nothing more than an accidental oversight on one specific point to not explicitly cite Martz's (2002) thesis in the matter of the reorientation of the holotype armor plate of the aetosaur *Redondasuchus reseri* and this is the entire basis of their accusation of plagiarism.

There was no intent to plagiarize or actual plagiarism of Martz's (2002) thesis by Spielmann et al.

## APPENDIX

Previous inconsistencies and uncertainty about the orientation of the type armor plate of *Redondasuchus*.

In the article Spielmann et al. provided the following discussion of the confusion over the orientation of the holotype armor plate of *Redondasuchus reseri*:

“The confusion is due to the holotype of *Redondasuchus reseri*, and thus of the genus *Redondasuchus*, being identified as a left dorsal paramedian scute. Although both Hunt and Lucas (1991) and Heckert et al. (1996) acknowledge an anterior bar, this is not congruent with the holotype scute being a left dorsal paramedian. In addition, Heckert et al. (1996) mislabeled their figure 5b as a posterior view, even though it is an anterior view of the holotype scute. This confusion is exacerbated by the scute always being figured, in dorsal view, with its anterior margin oriented towards the bottom of the page; this runs counter to typical protocol, which has the anterior margin facing the top of the page in dorsal view. Thus, we revise the orientation of the holotype scute of *R. reseri* and interpret it as a right dorsal paramedian, which makes the point of flexure one-third of the lateral distance along the scute. Although this is a change in the way *Redondasuchus* scutes are interpreted, it does little to fundamentally change the reconstruction of *Redondasuchus* as illustrated by Heckert et al. (1996, fig. 5). In the cross-sections of Heckert et al. (1996, fig. 5), it is clear that all of the dorsal and caudal paramedians are flexed one-third of the way from their medial margin, except for the holotype (Heckert et al., 1996, fig. 5c). This reevaluation of the holotype actually makes the scute flexure more consistent throughout the carapace (Fig. 1).”

Thus, if one examines the descriptions of the material and figures of Heckert et al. (1996) and Heckert and Lucas (2000), it is clear that they understood the correct orientation of the scute prior to Martz (2002), but that their text was inconsistent.

While it is true that Heckert et al. (1996, p. 622) listed the specimen in their discussion as an “almost complete left dorsal paramedian scute,” the description of the specimen does not bear out this description.

Heckert et al. (1996, p. 623) identify an “anterior bar...that is approximately 10 mm wide, flaring out somewhat along the medial edge.” As seen in fig. 3a of Heckert et al. (1996), the only feature that could be interpreted as the anterior bar is located on the bottom of the figure, running contrary to standard figure orientation protocol, and is indeed ~10 mm wide. Thus, it is clear that Heckert et al. (1996) understood which side was anterior, and thus that the scute in question should be a right not a left as they listed.

Further, Heckert et al. (1996, p. 623) note that the ventral keel “lies on the anterior portion of the scute, with the anterior margin of the keel typically positioned approximately 10 mm from the anterior edge of the scute.” Thus, in two places in the text

Heckert et al. (1996) clearly demonstrate that they are able to discern the correct orientation of the scute, though it is never correctly stated.

Heckert and Lucas (2000) follow a similar pattern, with the holotype being listed as a left dorsal paramedian but not being illustrated as such. In fig. 5d-e Heckert and Lucas (2000) correctly identify the dorsal and anterior views of the holotype scute, thus placing the scute in proper orientation.

Thus, in two separate publications prior to Martz's (2002) thesis, previous authors were able to correctly orient the holotype scute, but continued to erroneously identify it as a left scute.

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## SUGGESTIONS TO IMPROVE THE NMMNHS BULLETIN

1. Diversify the editorial board (add additional non-Museum scientists to editorial board).
2. Insure that an editor does not solely hand review of his/her article(s); another editor must do this.
3. Insist on two reviews by non-Museum staff (two outside reviews) of all articles.
4. In the case of a Bulletin (monograph) authored by Museum staff, an outside editor will handle the reviews.