

USED AND ABUSED: THE “LOVE STORY” BETWEEN THE TUȘTEA DINOSAUR NESTING SITE AND THE HAȘEG COUNTRY DINOSAURS GEOPARK

MIHAI DUMBRAVĂ, ALEXANDRU SOLOMON

Babeș-Bolyai University, Faculty of Biology and Geology, 1 Mihail Kogălniceanu Str., 400074, Cluj-Napoca, lilliensternus@gmail.com

Abstract. The present article describes the excavation history of the Tuștea Dinosaur nesting site from the Hașeg Basin and its unfortunate, compromised current state. Its aim is to provide a short summary of the excavations carried out at this site in recent years and to draw attention to the mismanagement and/or disinterest which led to the current state of what is a protected paleontological site of some scientific notoriety both nationally and abroad. Also this article touches on the subject of the Hașeg Dinosaurs Geopark in general and some other paleontological sites in particular and points out the current state of this protected area and the benefits or lack thereof that it has brought to the area and its economy.

Key words: Hașeg Geopark, Tuștea nesting site, dinosaur eggs, mismanagement.

Résumé. *Utilisé et abusé: «l'histoire d'amour» entre le site d'incubation des dinosaures de Tuștea et le Géoparc des Dinosaures Țara Hașegului.* Le Géoparc des Dinosaures Țara Hașegului a reçu le statut de parc national à partir de 2004 et admis dans le réseau Européen et Mondial des Géoparcs en 2005. Les buts déclarés ont été et restent toujours la conservation, protection et recherche des dépôts fossilifères continentaux du Crétacé de la région Țara Hașegului, mais aussi bien le développement économique de cette région par la mise en œuvre des projets culturels et touristiques. Le Géoparc est administré par l'Université de Bucarest représentée par le Prof. Dan Grigorescu, qui a été l'initiateur du projet et qui après un long hiatus y a repris les recherches paléontologiques à partir des années '80. En 2012, pendant une visite sur le site de Tuștea, l'auteur a pu observer les excavations mises en œuvre pendant l'été de l'année, qui ont détruit le site classique. Parmi les blocs de roche empilés par le bulldozer on a remarqué plusieurs fragments d'œufs de dinosaures ainsi que des fragments d'os des juvéniles ou matures. Pendant l'été de l'année 2011, l'auteur sous la coordination du Prof. Grigorescu a établi un plan de fouilles ayant pour but l'excavation de la surface classique du site, marquant sur terrain un réseau pour guider et orienter les futures fouilles. Tenant compte de la manière complètement rude dont le site a été excavé sous la coordination du Prof. Grigorescu, j'ai considéré utile à présenter l'histoire des excavations de Tuștea, ainsi que des détails sur le statut des autres sites paléontologiques importants du Géoparc. Malgré les buts dont on a fait déjà mention, on peut facilement constater que le manque d'intérêt de l'administration du Géoparc et des autorités locales a mené dans la majorité des situations à l'anonymat des sites géologiques et en autres cas, comme celui de Tuștea, même à la quasi destruction du site. En même temps, l'article veut attirer l'attention sur la manière des relations entre les employés/volontaires du Géoparc et les chercheurs qui étudient la région. On peut affirmer à ce moment-ci, que le Géoparc des Dinosaures Țara Hașegului, sous l'administration existante n'a pas abouti à atteindre les buts déclarés, cette structure étant connue au grand public roumain seulement par les reportages occasionnels des télévisions qui constatent et détaillent le vol des fossiles, vols commis parfois même par d'anciens employés du Géoparc. Le Géoparc reste en conséquence un concept plutôt inconnu même aux habitants de la région, qui exceptant une taxe supplémentaire pour l'expertise et l'approbation de chaque nouvelle construction à l'intérieur du Géoparc, n'ont eu aucun avantage matériel venant de leur statut d'habitants d'une zone de patrimoine mondial.

Mots-clés: Hașeg Géoparc, Tuștea site d'incubation, œufs de dinosaure, mauvaise gestion.

INTRODUCTION

The dinosaur bearing continental deposits of the Hașeg basin of Transylvania were brought to the attention of the scientific community a century ago through the work of the Hungarian Baron Ferencz Nopcsa, a naturalist and landowner in what was at the time part of Austria-Hungary. Nopcsa was the first to recognize the peculiar nature of the dinosaurs of the Hașeg area and would spend most of his life researching them and produced a number of scientific papers describing and naming several taxa of titanosaurs, ornithopods and nodosaurids (Nopcsa 1914, 1915). In 1932, another paleontologist of

some renown, Friedrich von Huene would also tackle the subject of the Hațeg dinosaurs and further advancing Nopcsa's work and emending the status of the titanosaurs described by the baron and erecting a new genus with a somewhat colonial undertone, *Magyarosaurus* (von Huene 1932).

After von Huene's work, a long hiatus in research began, only broken, when, at that time Lect. Dr. Dan Grigorescu chose to follow the advice of Acad. Prof. Dr. Doc. Theodor Neagu to turn away from Oligocene fishes and try to take up Nopcsa's work once again.

The Hațeg Country Dinosaurs Geopark was recognized as a national wildlife park in 2004 (HG2151/30/11//2004) and admitted into the UNESCO European Geoparks network and in the Global Geoparks Network in 2005. The Geopark is under the direct administration of Bucharest University's Hațeg Country Dinosaurs Geopark Administration Unit led by Prof. Univ. Dr. Dan Grigorescu and the non-governmental organization (NGO) Hațeg Dinosaurs Geopark Agency (AGDH). The economic development of the area is the responsibility of the Hațeg Country Intercommunal Association (AITH) presided over by Mr. Sorin Stefoni the current mayor of Densuș and having as its vice-president Prof. Dan Grigorescu.

The Tuștea nesting site is a form of protected paleontological preservation located in the central northwestern part of the Hațeg Basin in the General Berthelot commune (Fig. 1) and is under the administration of the Hațeg Country Dinosaurs Geo-park. Geologically, the Tuștea site is part of the Upper Member of the Densuș-Ciula Formation (Grigorescu *et al.*, 1990, 1994; Csiki and Grigorescu, 1998) and its fossil bearing part is composed of reddish and/or brick colored mudstones interlaced with paleosol levels and numerous calcretes. It is these mudstones that contain a remarkable number of very well preserved egg clutches and a wide assortment of skeletal elements of terrestrial and semi-aquatic vertebrates. Although the Densuș-Ciula Formation has yielded such remains at other sites, the Tuștea site is without a doubt the most abundant and the only one from which hatchling and juvenile dinosaur remains have been recovered. The Tuștea dinosaur nesting site represents the first occurrence of dinosaur eggs in Eastern Europe (Grigorescu *et al.* 1990, 1994).

DISCOVERY

The Tuștea dinosaur nesting site was fortuitously discovered in 1988 by Geol. Eng. Nicolae Ghinescu, a native of Tuștea village and former student at Bucharest University after a landslide on the northeastern slope of the Ultoane hill (Fig. 2). Recognizing the unusual surface pattern of the "concretions" thus uncovered, he contacted Prof. Univ. Dr. Marin Șeclăman from Bucharest University's Mineralogy department. Prof. Șeclăman recognizing the biological nature of the "concretions" handed them over to Prof. Dan Grigorescu of the Paleontology department who had been working in the area of the Hațeg Basin for some years but who had restricted his field work to the classical outcrops discovered by Nopcsa along the Sibișel Valley.

Recognizing the "concretions" as dinosaur eggs, Prof. Grigorescu shifted much of the efforts of the student teams from the Sânpetru area to the Tuștea site.

EXCAVATION OF THE SITE

With help from S.C. Hidroconstrucția RMR S.A., the top of the Ultoane hill as well as its northwestern slope were leveled to about 70 cm above the level at which the eggs were first discovered. Two platforms were created as a result of the excavation, the upper platform being the one in which the clutches were discovered. This platform was then excavated vertically from the northeast forming a middle platform about 1 meter below the top surface of the upper one and during the subsequent years provided many complete egg clutches and a few isolated eggs along with a large

number of osteological remains belonging to *Zalmoxes robustus*, *Telmatosaurus transsylvanicus*, *Magyarosaurus dacus*, *Allodaposuchus precedens*, *Kallokibotium bajazidi* (Grigorescu 1983, 2005), various theropods (Csiki & Grigorescu, 1998) and multituberculate mammal teeth as well as remains of hatchlings associated with the egg clutches (Fig. 3 a, b).

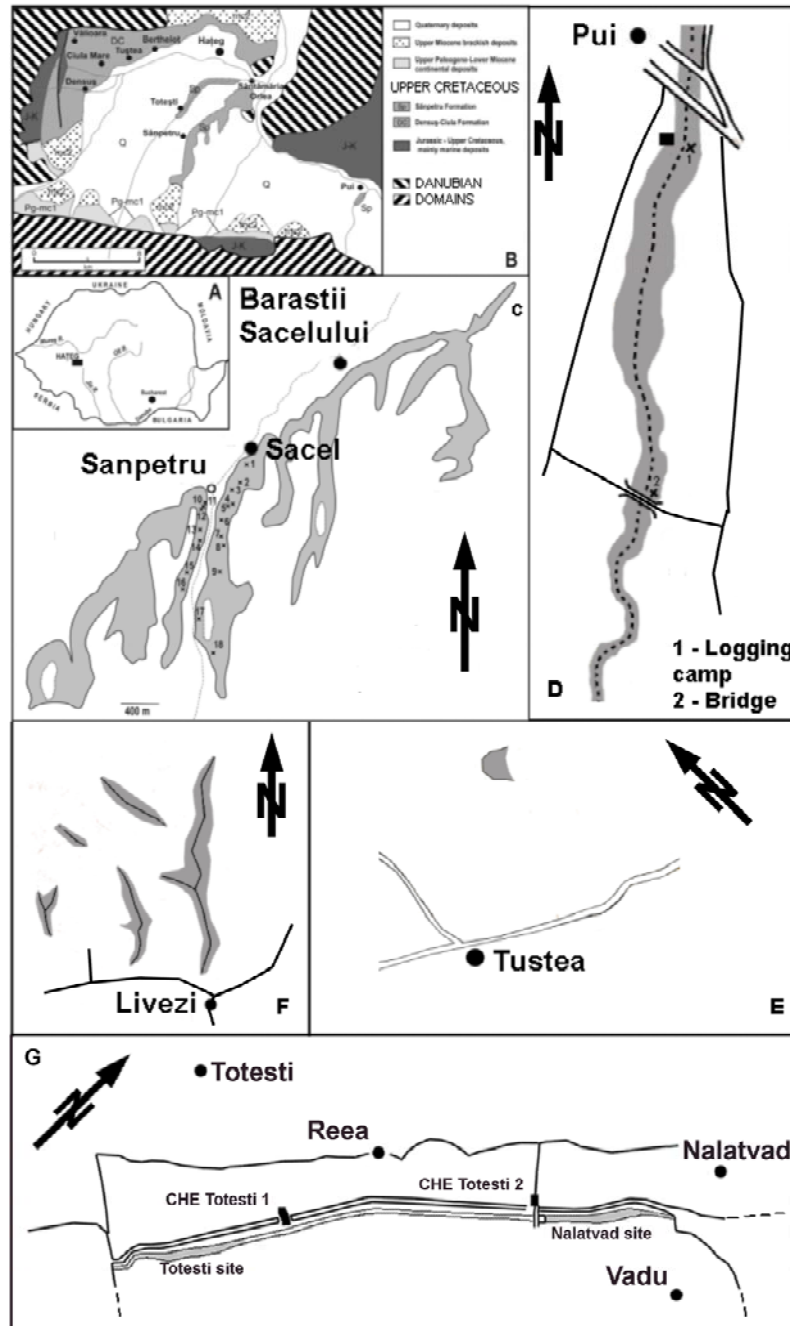


Fig. 1 – Geological map of the Hațeg Basin and detailed location maps of the sites discussed in this article. A, B, C modified after Csiki *et al.* 2010; D, E, F, G. drawn after photographs from Google Earth.



Fig. 2 – The northwestern slope of the Ultoane hill after the 1989 landslide that exposed the egg clutches.
Modified from Weishampel & Jianu 2011.

The site was almost continuously excavated every summer as part of the “Castelul Corvineștilor Summer School” until 2008 when due to economic reasons the excavations no longer received funding. Excavations were carried out by a joint team comprised mainly of geology students from the Bucharest University’s Faculty of Geology and Geophysics and the Petroșani University’s Faculty Mines. The funding for the excavations was provided by the Petroșani University and administered by Prof. Grigorescu. In exchange for the funding provided, the Petroșani University received on long term loan a clutch of eggs excavated from the site which was later returned.

In the field, the excavations were led by Lect. Dr. Zoltan Csiki from Bucharest University and Lect. Dr. Lorincz Csaba from the Petroșani University.

The GPS coordinates of important specimens discovered were plotted with a hand-held GPS device, a practice begun only in 2006, but due to the inaccuracies involved which were in the region of a few meters, a hand drawn map of the site was made to help position the finds more accurately. Data relating to the orientation of the long axis of relevant specimens was only taken in the final year of excavations. The one piece of data which was constantly recorded was the depth of the specimens.

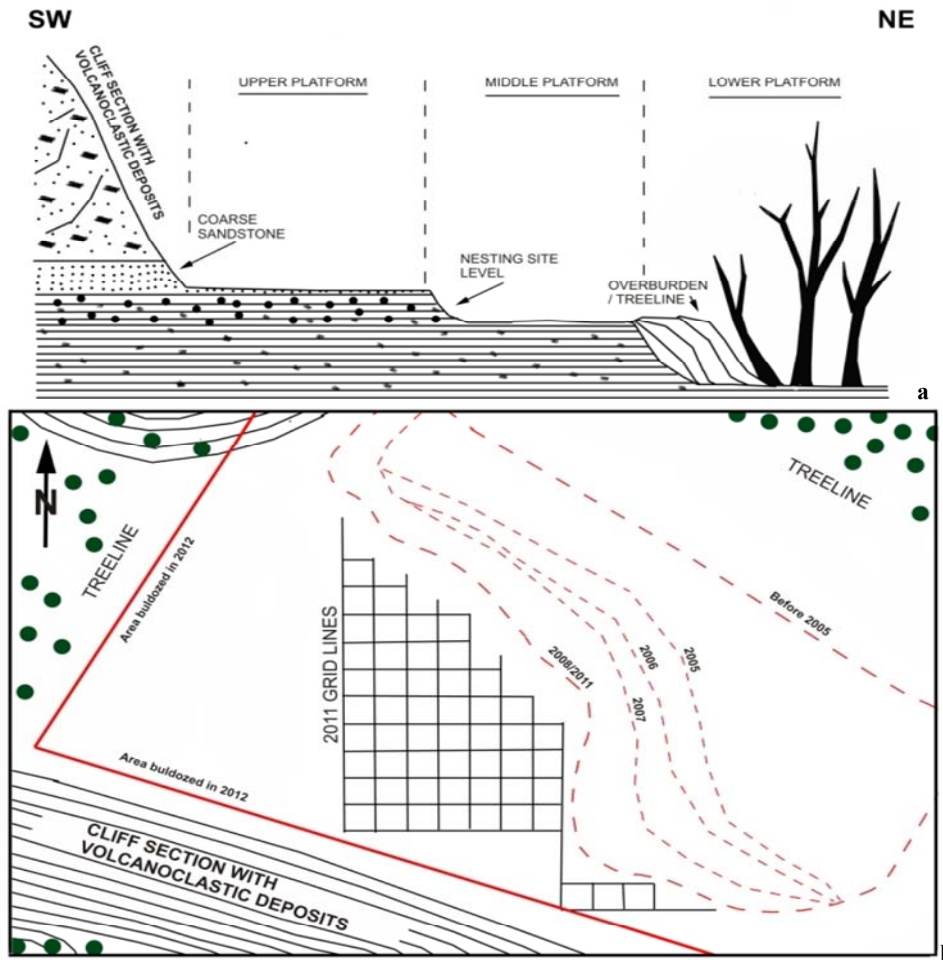


Fig. 3 – a. Schematic crosssection through the Tuștea nesting site showing the original division of the site into distinct platforms before 2012, b. Schematic map of the site showing the progression of the excavations from 2005 to 2011, the grid lines set-up in 2011 and the area excavated in 2012.

Unfortunately, the marker chosen for a reference point was a young locust tree *Robinia pseudoacacia* (“salcâm” in Romanian) which in 2005 lay only about a meter ahead of the excavation front and was subsequently removed in 2006 thereby rendering all measurements taken from it useless. Only with effort in 2006 was the approximate location of the tree found but even then with no great accuracy.

Excavation of the egg clutches were at first undertaken by removing individual eggs and not the complete clutches using the plaster jacket method. It is truly unfortunate that this method was employed because most of the eggs excavated soon after the discovery of the site can no longer be associated into any particular clutch. Also, most of the specimens of hatchlings were heavily coated with cyanoacrylate to help stabilize them, a method which has proven to be thoroughly efficient but also extremely difficult to remove, in one particularly well preserved specimen of a hatchling taking about three months to remove the solidified glue.

The method of excavation at the site was, in my opinion, not the most informative one. Given the fact that the egg bearing deposits laid horizontally the preferred method would have been the one employed in archeological excavations by means of a rectangular grid with 1 square meter sections, each worker being assigned to a particular section which he would excavate in 1 inch layers, noting and sketching the finds as the excavation progressed. This method would have resulted in a much

higher taphonomical resolution and better mapping of the site. In the summer of 2011, the author erected a rectangular grid on a part of the unexcavated portion of the site as a means of guiding further excavations (Fig. 3b).

In past years excavations at the Tușteea site were carried out mostly manually with pick and shovel and occasionally with the aid of a jack-hammer for the removal of large blocks of the reddish fossil bearing mudstone which were then broken apart with hammer and chisel. The employment of a jack-hammer for the removal of the blocks was a very efficient technique from the standpoint of the amount of material removed but on several occasions also proved to be very destructive as the worker handling it only observed that he had gone through a clutch of eggs or bones when broken fragments were revealed (*pers. obs.*). In the summer of 2011, preparations were made for the erection of a visitor's center on the site. The visitor's center would have included the entire upper and middle platforms and was imagined as housing resin casts of the clutches already discovered, graphic reconstructions of the site and providing a closed working environment for the excavation of the remainder of the fossil bearing horizon which could thus be worked on throughout the year. The section in front of the site which contained volcanoclastic material was regarded as especially important and a variety of plans were put forward to stabilize the rapidly eroding slope. Access to the center was to be made via a ramp or staircase beginning on the lowermost platform. Preparations in the summer of 2011 were carried out by myself and Ms. Eng. Geol. Adriana Constantinescu and consisted of cutting down all the trees on the lowermost platform and surveying various access routes to the site as the usual route of access which was located near the entrance to the Tușteea village was no longer available.

It is worth mentioning at this point that in 2007 the General Berthelot council erected several panels for the purpose of ensuring that tourists would find their way to the site. Unfortunately, the panels were removed by Prof. Grigorescu who stated as the reason for his actions that marking the site would invite fossil poachers...???

From 2008 until today excavations were carried out by individual students and researchers stationed at General Berthelot village and apart from two partial eggs discovered by Ms. Eng. Geol. Adriana Constantinescu and the author in late summer of 2011 during filming for an episode of a documentary film, no other significant discoveries have been made within the limits of the site.

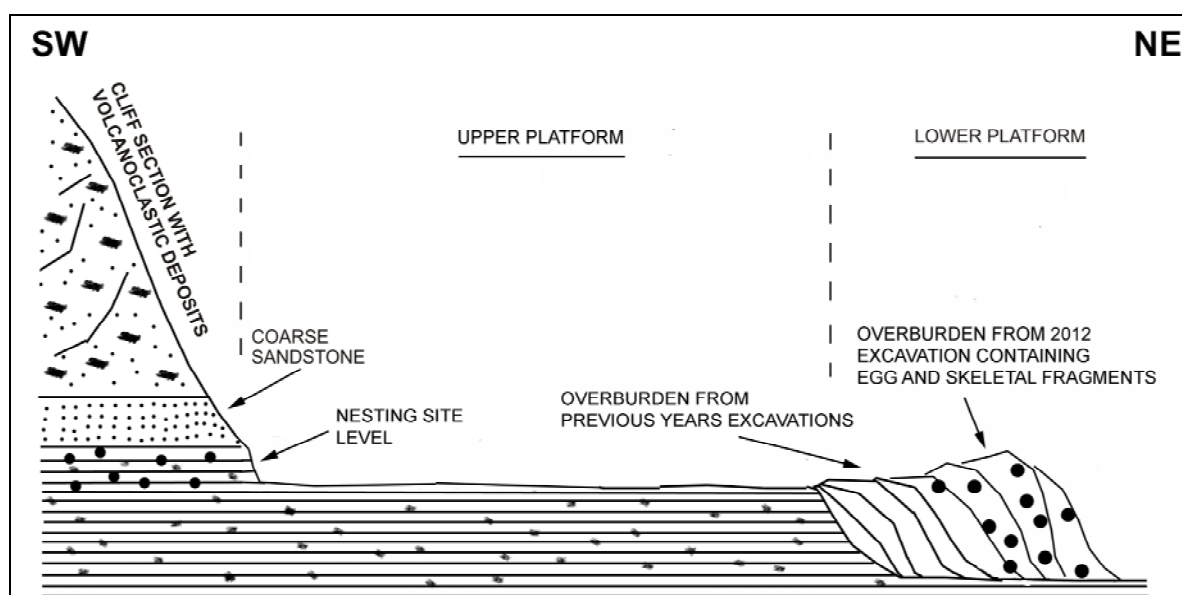


Fig. 4 – Schematic section through the Tușteea nesting site after the 2012 excavation showing the removal of the upper platform which contained the nesting level.

CURRENT STATE OF THE TUȘTEA SITE

In 2011, while working at S.C. Hidroconstrucția RMR S.A., I agreed to help Prof. Grigorescu in planning the future excavations as well as laying out tentative plans for the visitor's center which was to be erected on the site. As part of this plan, a grid of some 60 square meters was set up onsite as a visual aid for future excavations which I had planned to be carried out from the top as opposed to the previous method of front excavation.

In September 2012, together with Dr. Răzvan Andrei we visited the site and discovered several partial eggs and bone fragments from hatchlings lying exposed on the surface of the pile dumped on the lowermost platform by the bulldozer (Fig. 5b).

This pile represents all that is left of the upper platform which contained the nesting level (Fig. 5). As can be seen from fig. 4A, the site has suffered severely as a result of the 2012 excavations and is at the moment compromised (Fig. 5).

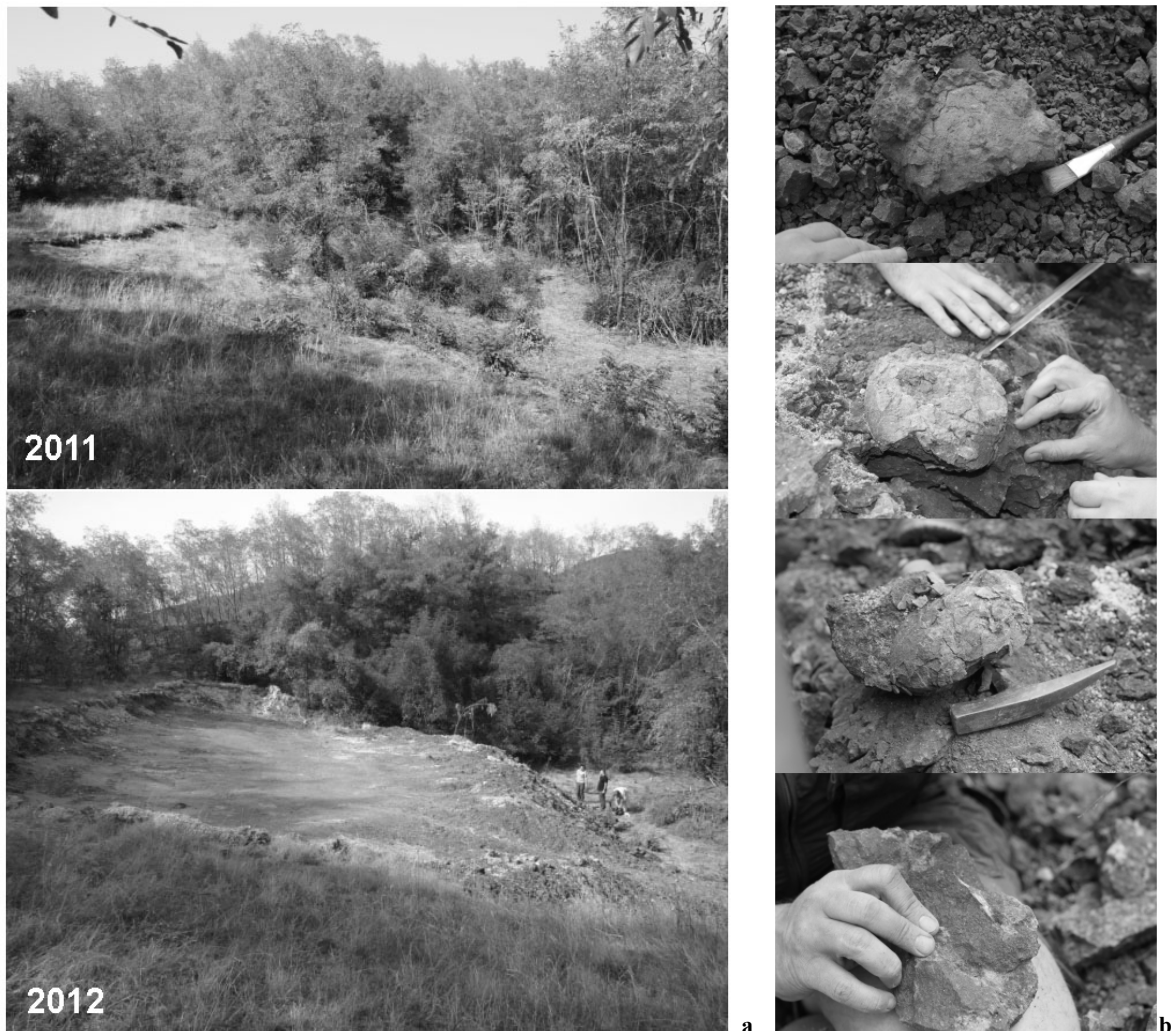


Fig. 5 – a. Comparison of the appearance of the Tuștea nesting site in 2011, 3 years after the last major excavations were undertaken and the site, and in 2012 after the massive excavations which led to the destruction of the horizon containing the nesting level; a. Partial eggs and bone fragments discovered by the author in 2012 shortly after the bulldozing of the site. Images by the author's.

It is truly unfortunate that the excavation was made in such a haphazard way that what was left of the classical site can now be found in a pile of jumbled mudstone blocks.

Several weeks after our discovery of the state of affairs at the site we returned to the site but due to recent rains in the area the entire site and especially the pile was turned into more or less a muddy quagmire. We do not believe that any macropaleontological remains can be salvaged from that pile as it will most likely be overgrown by springtime and the winter snow and ice will further destroy any fossils near the surface while the winter freeze-thaw cycle will serve to destroy those buried within.

STATE OF OTHER FOSSIL SITES IN THE HAȚEG GEOPARK

Unfortunately, the Tuștea site is not the only example of mismanagement or disinterest on the part of both the local authorities and the managers of the Hațeg Country Dinosaurs Geopark.

The classical outcrops along the Sibișel Valley near Sânpetru village (Fig. 1c, 6) have also been the victims of neglect with only solitary and marginally informative panels as the only indicators regarding the presence of important Paleontological sites in the area. The Sibișel valley was for some time regarded as the only area of the Hațeg Basin to contain dinosaur remains and was in the beginning the prime focus of research led by Prof. Grigorescu until the fortuitous discovery of the Tuștea nesting site. Besides its historical importance, the Sibișel Valley is also the place where the first Cretaceous mammals were discovered in Romania, *Kogaionon unguoreanui* (Rădulescu & Samson, 1996), the first member of a new family of multituberculate mammals, the Kogaionidae.

From 2005 onwards, the Sibișel valley sites have been mostly abandoned, new discoveries at the Pui and Tuștea sites ensuring that the difficulty to access and excavate sites along this valley received dwindling attention. The last major excavation on the Sibișel valley was carried out by the author in the summer of 2011 at the site called “La Groapă” (Fig. 1c) where an attempt was made to uncover some osteological remains left behind *in situ* several years before due to the difficulty in extracting them from the very hard polymictic sandstone matrix. The attempt was unsuccessful as the amount of overburden that had buried the fossil bearing horizon was around 2 meters in depth.

Despite its status as the “de facto” site for dinosaur remains in the Hațeg Basin, the Sibișel Valley and its outcrops has been ignored with regard to conservation of the sites in a manner that would lend itself to appreciation by visiting tourists. There are only a few scattered information panels (Fig. 7) and the outcrops themselves have been mostly overgrown to such an extent that natural weathering has almost ceased and along with it the weathering of new specimens (Fig. 6). The only place in the Sibișel valley where a tourist or visiting researcher can get a glimpse of any fossil specimen is the residence of the site’s custodian, Mr. Vulc, a long time collaborator of Bucharest University and native of Sânpetru village.

Apart from its scientific importance, the Sibișel Valley has one more dubious claim to fame, that of being one of the most pillaged fossil sites in Romania. The reason for this unflattering situation is apart from the disinterest of local authorities and managers of the Geopark, the remote and difficult access to the sites along the valley where one can walk, prospect and collect whatever specimens have eroded out of the hillsides without any interference and indeed without encountering anyone. The Sânpetru village is also home to a long time fossil poacher, Florin Vulc (unrelated to the site’s custodian) arrested in 2010 for just such practices and who later worked for a time as an employee of Bucharest University as a part time Ranger for the Hațeg Geopark under the direct supervision and guidance of Prof. Grigorescu until he resumed his old trade.

Within the past year, several Rangers have been employed by the Hațeg Geopark on a voluntary basis with the aim of patrolling and monitoring of the sites. The Rangers receive no salary for their work and besides a pair of hiking boots, no additional equipment. Apart from the obvious problems which go hand in hand with such a method of employment that relies on the good will of enthusiastic people but in whom not too much stock should be put, another issue has surfaced in the summer field season of 2012.



Fig. 6 – Outcrops along the Sibisel valley belonging to the Sânpetru Formation.
Image courtesy of Prof. Univ. Dr. Vlad Codrea.



Fig. 7 – Tourist information and warning panels on the Sibisel valley.
Image courtesy of Lect. Univ. Dr. Ovidiu Barbu.

It seems to the author from several encounters with these Rangers that not only are they completely ill equipped to handle any encounter in the field as they possess no identification of their office, but that they also exhibit an accusatory stance towards any researcher whom they happen to stumble upon. The Rangers of the Hațeg Geopark seem more as glorified informants quick to call in anyone they meet in the field to the Geopark's administration than caretakers of sites that bear valuable scientific information. This situation does little honor to the Romanian scientific community and even less to the meaningful collaboration between the Universities and researchers interested in the paleofauna and geology of the area.

Some 35 kilometers away from the town of Hațeg, on the road to Petroșani, another important site can be found, the Râul Bărbat site in the town of Pui (Fig. 1D, 8).



Fig. 8 – View of the red mudstone deposits at the Pui site in the Râul Bărbat.
Image by the author's.

This site, regarded by many as the most important paleontological site with regard to skeletal remains is completely unknown even among the townspeople despite the fact that they walk past it everyday. The site is located in the Râul Bărbat and comprises the reddish mudstones of the Densuș-Ciula Formation that outcrop in the riverbed. It is the only site in the Hațeg basin which exposes new specimens on a constant basis. Not only is the rate at which specimens are exposed that make this a site of unparalleled importance but also the fact that sometimes articulated specimens are exposed as happened in the late summer of 2011 when almost the entire posterior part of an articulated skeleton of *Zalmoxes robustus* was discovered at the site by Ms. Eng. Geol. Adriana Constantinescu and excavated. The site has also yielded the second multituberculate mammal genus from Romania, *Barbatodon transylvanicum* Rădulescu & Samson 1986, the second member of the Kogaionidae family. The Râul Bărbat site is exposed from the level of the automotive bridge in the center of town to almost a kilometer upriver. Despite its importance and despite the fact that it is the only site in the Hațeg Geopark where tourists can see an actual dinosaur bone *in situ*, not one information panel can be found anywhere. The worrisome aspect of the site is represented by the planned construction of a Hydroelectric Plant upstream, a plant which if built would cut the rivers flow down to a minimum and thereby stop all erosion on the riverbed which is responsible for weathering out new specimens but would also preclude the removal of boulders eroded out of the river terrace and thus further impede access to the fossil bearing horizon.



Fig. 9 – Ravines and landslides at the Livezi site. Image by the author.

A few kilometers away from General Berthelot Village lies another site, also recently discovered, the site of Livezi (Fig. 1F, 9). This site lies on the northern slope of the hill overlooking the village of Livezi and is part of the same formation as the Tuștea nesting site (Grigorescu & Csiki, 2008). Here numerous eggshell fragments have been discovered as well as a large, complete femur of the titanosaur *Magyarosaurus dacus*. At a slightly higher level on the slope of one of the ravines which make up the site, several partial eggs have been discovered lying close to the level of the plant soil and it has been suggested that this area might be regarded as a continuation of the Tuștea nesting site.

As with the Râul Bărbat site, there is no information panel to point out the site or at least mention its value.

Two last site of importance and indeed, judging from the discoveries there probably the most important are also the least known. The sites of Totești and Nălațvad (Fig. 1G) are located near the Totești 1 and 2 Hydroelectric Plants just outside the villages of Totești and Nălațvad on the Râul Mare. The Totești and Nălațvad sites represent a lower stratigraphic level than the Tuștea site. The layers are nearly at 90 degrees which sometimes causes the fossils to stand upright of the matrix.

The sites were uncovered during the excavation of a secondary spillway for the Râul Mare Dams and Hydroelectric plants. This spillway always has a few inches of water and except for the algae which grow on any surface; the site is a pleasure to work on. The sites of Totești and Nălațvad on the Râul Mare which were discovered by an international team led by Prof. Univ. Dr. Vlad Codrea of Babeș-Bolyai University's Faculty of Biology and Geology have yielded one new genus and species of titanosaur sauropod, *Paludititan nalatzensis* Csiki, Codrea, Jipa-Murzea & Godefroit, 2010 and the most complete dinosaur skeleton yet discovered in the Hațeg Basin, a specimen of *Zalmoxes robustus* now housed in the Natural History Museum in Bruxelles, Belgium.

Also, this site is the only other, apart from Tuștea, where complete dinosaur egg clutches have been discovered and retrieved. From their discovery by the Prof. Codrea and his team, these sites have never failed to surprise, recent discoveries including the eggs of primitive Enantiornithine birds and the bones of hatchlings, skin impressions on the internal surfaces of the eggshells of dinosaurs remarkably similar to those found in Argentina and remains of multituberculate mammals (Van Itterbeck *et al.* 2004).



Fig. 10 – The Nălațvad site, downstream of the CHE Totești 2 plant. The near vertical fossil bearing horizon can be seen in the riverbed and outcropping on the banks. Image courtesy of Prof. Univ. Dr. Vlad Codrea.

Despite the fact that the sites were discovered through the efforts of the Babeș-Bolyai team, they have been excavated by Bucharest University also, their location in the Hațeg Geopark giving Prof. Grigorescu and his associates full control over them and also the means with which to deny or at least intrude in the research carried out by others as happened in 2012 through the “diligent efforts” of the Geopark’s rangers.

However, in a most dishonorable double standard, access to the sites discovered by teams from Bucharest has been “forbidden” to other researchers, who only out of respect for that unwritten law of paleontology which states that “whoever discovers a site has the right to excavate and publish it and invite whomever he/she wishes” have only visited those sites as a professional curiosity without engaging in excavations.

It seems to me and others that this “Plantation owner” or “Lordly” attitude towards the sites of the Hațeg Geopark is at the moment, the sole occupation and interest of Prof. Grigorescu, who seems quite content in frustrating as much as possible the research of any scientist who does not belong on his “team” or who is in scientific disagreement with him, the state of the sites described in this article as well as others bearing visible testament to the above appreciation of the way in which the Geopark has been and is run.

CONCLUSIONS

The Paleontological preserves in the Hațeg Country Dinosaurs Geopark exhibit clear signs of neglect and mismanaging. While some sites like Tuștea have been all but destroyed through carelessness or improper planning as to their final purpose, others remain unknown to anyone but the scientists who work on them. Despite the fact that the Geopark has been established for the better part of a decade,

the situation in the field remains much as it did when researchers from Bucharest University resumed work in the area after the long hiatus traversed from Nopcsa's last fossil collecting trips.

The much touted and long awaited economic advantages that the envisioned tourist influx was to bring has not materialized in any palpable way for the locals.

Not only have the sites not been at least protected, but in the case of Tuștea, the Geopark scheme has actually been the disaster which could have been so easily avoided. The Hațeg Country Dinosaurs Geopark remains for most Romanians a place unheard of, the first time that they hear of even the existence of dinosaurs in this country being the occasional newspaper investigation or 15 minute television coverage of stolen dinosaur eggs from the area. The most recent of such unflattering media coverage's taking place less than a year ago when 3 eggs stolen from the Tuștea site were given back to the Romanian government by the Italian police. In the light of such events it can be argued that the establishment of the Geopark has in fact done little to promote the area for tourists but more to bring it to the attention of fossil collectors capable of paying top dollar for unique fossils.

The only palpable proof that something has been achieved in the area does not unfortunately belong to the Geopark but to the Romanian Academy who managed to obtain funding for the restoration of General Berthelot's mansion located in the village of General Berthelot. This mansion which now houses the Interdisciplinary research center of the Romanian Academy has provided the only new jobs in the area which can be linked to the Hațeg Geopark.

All in all, the Geopark's administration has been content with regarding the area as its own personal fiefdom where every new construction must be approved personally by the chief administrator for a set tax established by the local council and where every researcher must obtain a permit to excavate any specimen and indeed visit without being hassled or his movements monitored by the parks rangers.

One could also be forgiven for asking where the funding for the Geopark has gone, the money received monthly from the local communes which pay a yearly tax for their membership, the funds from the European Union, Bucharest University and the Romanian Government.

In all regards except the scientific, the Hațeg Country Dinosaurs Geopark has failed to live up to expectations, few tourists visit the area and most of those who arrive find out that they are in a Geopark dedicated to the dinosaurs of the area only if they happen to stay overnight at the Vila Veche Boarding House and have a chat with the establishments owner. The few locals who have heard of dinosaurs in the area know of them mostly from stories of Baron Nopcsa's adventures and only a handful can point the wandering foreigner to a paleontological site where unfortunately they will come to the somber realization that only bear rocks without any story to captivate the imagination are their only recompense.

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