

represents a specimen of *Pseudopalatus* sp. (Parker, 2005b). Note that Parker (2005b:44) erroneously lists this specimen as PEFO 31218. This specimen is the only vertebrate body fossil known from the Flattops One bed.

Petrified Forest Member

Woody (this volume) restricted the Petrified Forest Member in PEFO to strata originally referred to as the upper portion of the Petrified Forest Member (Billingsley, 1985). Laterally persistent sandstone beds are common in this unit and have been used as marker beds (e.g., Billingsley, 1985; Long and Murry, 1995). Sandstone beds in the southern end of the park are informally known as the Flattops sandstones, whereas those in the northern end of the park are informally called the Painted Desert sandstones (Billingsley, 1985). Direct correlation of these beds between the northern and southern ends of the park is extremely difficult; however it appears that Painted Desert Sandstone #1 and Flattops Sandstone #2 are roughly equal (pers. obs.). Alternatively, Therrien and Fastovsky (2000) correlated the Painted Desert Sandstone #1 with the Flattops Sandstone #3, approximately 25-30 meters of vertical difference from my interpretation.

A volcanoclastic unit that represents the highest mappable sandstone bed of the Petrified Forest Member in the north end of the park was named the Black Forest Bed by Ash (1992). Riggs et al. (2003) determined a radiometric date of 213 ± 1.7 ma for this bed using detrital zircons. The Black Forest Bed contains a large concentration of logs that are assigned to *Araucarioxylon arizonicum* Knowlton, 1888, *Schilderia adamanica* Daugherty, 1934, *Woodworthia arizonica* Jeffrey, 1910. Vertebrates from the Black Forest Bed include pseudopalatine phytosaurs and *Tyothorax coccinarum*. The presence of *Paratyothorax* (Long and Murry, 1995) from this horizon is based on an undiagnostic fragment.

PFV 075 – Karen’s Point. This locality is in the Flattops area of the park and situated just above Flattops Sandstone #2. Significant taxa from this site include the aetosaurs *Tyothorax coccinarum* and “*Desmatosuchus*” *chamaensis* (Parker and Irmis, 2005). “*D.*” *chamaensis* is otherwise only known from New Mexico in the Petrified Forest Member of the Chama Basin and the Bull Canyon Formation of Quay County (Zeigler et al., 2002). Parker (2003, in press) determined that “*D.*” *chamaensis* does not represent a valid species of *Desmatosuchus* and is instead referable to a new genus closely related to *Paratyothorax*.

PFV 070 – Flattops NW. This locality is also in the Flattops area of the park and is located at the top of Flattops Sandstone #2. Significant specimens from this site include well-preserved paramedian plates of *Tyothorax coccinarum*.

PFV 294 – Delaney Tank NE. This locality is just west of Point of Bluff and is situated stratigraphically just above the Flattops Sandstone #2. In 1962, the MNA collected a

partial lateral plate (MNA V697) of *Desmatosuchus* from this locality that Long and Ballew (1985) interpreted as a cervical lateral plate of *D. haplocerus*. Parker (2005a) determined that it was instead from the dorsal lateral region and represented the only known Arizona occurrence of *Desmatosuchus smalli*. *Tyothorax coccinarum* also occurs at this locality.

PFV 040 – Dinosaur Hill. The fauna of the Dinosaur Hill locality has been extensively discussed by Padian (1986, 1990), Murry and Long (1989), Parrish (1991), Long and Murry (1995); Hunt et al. (1998), and Heckert (2004). Significant taxa from this locality include *Coelophysis* sp., *Hesperosuchus agilis*, *Apachesaurus gregorii*, *Pseudopalatus* sp., *Tyothorax coccinarum*, and *Revueltosaurus callenderi*.

PFV034 – Billingsley Hill. This site is located approximately 450 meters due north of and is 6 meters stratigraphically lower than PFV 040. This locality contains *Pseudopalatus* sp., *Tyothorax coccinarum*, and *Apachesaurus gregorii*. More importantly, this site is the type locality for *Kraterokheirodon colberti*, an enigmatic tetrapod known only from this locality and from a second locality near St. Johns, Arizona that is situated either low in the Blue Mesa Member or high in the Mesa Redondo (=Bluewater Creek) Member (Irmis and Parker, 2005).

PFV 020 – Dinosaur Hollow. This locality is roughly at the same stratigraphic horizon as PFV 040, but 6 kilometers to the northeast. This is the type locality of the basal saurischian *Chindesaurus bryansmalli* (Long and Murry, 1995). Long and Murry (1995) and unpublished field notes from Long also document a partial skeleton of *Shuvosaurus* (= *Chatterjeea*) from this locality, although this specimen is lost. Other taxa occurring at this locality include *Tyothorax coccinarum* and *Apachesaurus gregorii*.

PFV 215 – Zuni Well Mound. This site is stratigraphically 18 meters above PFV 040, 1.8 km to the northeast, and is located just slightly above the Lithodendron Wash bed of Heckert and Lucas (2002) (=Painted Desert Sandstone #3 of Billingsley, 1985). Significant fossils from this locality include a centrum of a large metoposaurid, material of *Apachesaurus gregorii*, and teeth of *Revueltosaurus callenderi*. Also recovered from this site was a partial skeleton of the diapsid *Vancleavea* sp. (Parker and Irmis, 2005) and purported theropod material (Hunt and Wright, 1999).

PFV 231 – The Giving Site. Stratigraphically this site is approximately 6 meters above PFV 040 and PFV 020, and 12 m below PFV 215. The fauna at this locality is quite diverse and represents only the second occurrence of both *Coelophysis* sp. and *Chindesaurus bryansmalli* (Parker and Irmis, 2005). Other taxa include indeterminate pseudopalatine phytosaurs, adult and juvenile specimens of *Tyothorax*, *Vancleavea* sp., *Shuvosaurus* sp.,