

Brief Communication

FOOTPRINT EVIDENCE OF THE CHINESE YEREN

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ABSTRACT. The 1970's saw a keen interest by the Chinese government in the "snowman question." A state-sponsored expedition was mounted to central China (Hubei Province) to investigate the possible presence of a correspondingly large bipedal hominid, referred to as the yeren, or wild man. In 1977, a team lead by Professor Zhou Guoxing gathered eyewitness accounts, hair samples, and footprints, but no specimen of yeren was retrieved. In 2008 the authors met at the Beijing Museum of Natural and proceeded to Hubei's Shennongjia National Nature Reserve to interview witnesses, including a park ranger, Yuan Yuhao, who claimed to have observed a yeren in the reserve, at a distance of approximately 500 m. The site was at an elevation of approximately 2100 m in a mosaic of forest and sedge meadows. The yeren covered in reddish brown hair, was sunning itself. When Yuan called out, it rose and walked away bipedally. Yuan cast a clear pair of its footprints, which measured approximately 38 cm in length, 16.5 cm across the forefoot, and 10 cm across the heel. The footprints indicated a plantigrade, pentadactyl foot lacking evidence of claws. The hallux was larger than the lateral toes and non-divergent. A midtarsal pressure ridge indicated a significant degree of flexibility in the midfoot. In all distinguishing characteristics the casts resembled the ichnotaxon Anthropoidipes ameriborealis MELDRUM 2007. This evidence suggests independent corroboration of the existence of an unrecognized bipedal primate species with a circum-Pacific distribution.

KEY WORDS: sasquatch, wildman, bipedal locomotion, midtarsal break

Numerous narratives of encounters with an unidentified bipedal hominid have been reported from central China, especially in Hubei Province (Fig. 1.). The Shennongjia region of Hubei Province comprises 3200 km² of montane forest, with an average elevation of over 2000 m (latitude 31.5° N. longitude 110.4° E). The region has long harbored legends of the yeren or wildman (Dong, 2000; Shackley, 1983; Zhou, 1982). These were given particular note in the 1970's. One incident in 1976 involved five officials of the Regional Forestry Committee, who approached to within a few meters of the upright creature they described as covered in reddish brown hair, excepting the palms,

soles, and relatively flat face showing a mixture of human-like and ape-like features. It reportedly walked upright, standing nearly 2 m in height, leaving large human-like footprints (Zhou, n.d.).

A large-scale sustained scientific expedition sponsored by the Chinese Academy of Sciences was undertaken in the region in 1977. It was lead by Prof. Zhou Guoxing, Beijing Natural History Museum, and involved over 100 members, including soldiers in the Red Army (Fig. 2.). Local inhabitants were interviewed, the remote mountains were searched, and hair, footprints, and scat were recovered, but no specimen of *yeren* was obtained.

Eyewitness descriptions yielded a consistent profile of a creature 2.0 - 2.5 m in height; generally upright; covered in reddish brown hair (but also, grey, brownish-yellow, black, or rarely white in color); human-shaped footprints measuring 30 - 40 cm in length, with the hallux sometimes somewhat abducted; females with prominent breasts; solitary; monotonous yelling call; omnivorous diet; lack of tools or material culture; and frequently nocturnal activity (Zhou, 1982).

In 2008, Meldrum met with Zhou at the Beijing Museum of Natural History and reviewed some of the evidence collected during the Shennongjia expeditions. They next proceeded to Hubei Province, where additional eyewitnesses were interviewed. Zhang Jiahong, a farmer near the village of Mu Yu, described an encounter with two yeren while gathering medicinal herbs on September 15, 2005. He observed the hominoids from a distance of 15 m feeding on vegetation. They stood over 2 m tall, were entirely hair-covered, including the flat face, excepting the eyes and largo nose. He nervously coughed, alerting the yeren to his presence. They slowly retreated from the scene, remaining upright.

An identikit was provided, which included various photographs and depictions of bear and primates common to the region, various depictions of known great apes, artistic renderings of various hominins, and conceptions of the *yeren* as well as the North American sasquatch. Zhang was impressed by the color of the orangutan hair, but assertively selected the rendering illustrated in Figure 3 as most similar to what he saw.

In Shennongjia National Nature Reserve a park ranger, Yuan Yuhao, was interviewed. Yuan, who had been a lay member of the original 1970s investigations (Schmalzer, 2008), claimed to have observed a *yeren* in the reserve in 1995. He was on patrol climbing a slope near the head of a valley at an elevation of approximately 2100 m. The

site is a mosaic of fir forest and sedge meadows. Yuan observed the *yeren* through binoculars at a distance of approximately 500 m. It was covered in reddish brown hair, reclining and sunning itself on the exposed facing slope. When Yuan called out to it, it returned his gaze and finally arose and walked away bipedally into the nearby treeline. Yuan estimated its height at 2.3 m. Yuan concurred with Zhang's selection of the hominoid depiction in Figure 3. He subsequently tracked the creature and cast a clear pair of its footprints alongside a nearby spring.

The casts measure approximately 38 cm in length, 16.5 cm across the forefoot, and 10 cm across the heel (Fig. 4). The footprints indicate a plantigrade, pentadactyl foot lacking evidence of claws (Fig. 5). hallux is larger than the lateral toes and nondivergent. A distinct midtarsal pressure ridge indicates a significant degree of flexibility in the midfoot. The deepest point on the cast lies on the medial margin just distal to the pressure ridge, apparently beneath the navicular. In all distinguishing characteristics the casts resemble footprint casts recovered at the Patterson-Gimlin film site at Bluff Creek, in northern California, 1967 (Figs. 6, 7).

Presumably the right and left footprints were left as the *yeren* squatted beside the spring. This action would have elevated the hindfoot, concentrating pressure beneath the forefoot distal to the transverse tarsal joint. The plasticity of the moist bare soil resulted in the pressure ridge proximal to the transverse tarsal joint (Fig. 8).

The remarkable similarity of the midtarsal pressure ridge in the *yeren* casts to that present in the example attributed to the sasquatch, i.e., referred to *Anthropoidipes ameriborealis* MELDRUM 2007 (Fig. 9, 10), denotes a common architecture of the foot, characterized by a flat flexible midfoot lacking a fixed longitudinal arch, and

retaining considerable mobility at the midtarsus (Meldrum, 2004; 2007).

The interpretation of this feature is further evidenced by the occurrence of "half tracks" (Fig. 11) in which only the forefoot leaves an impression, due to the elevated heel segment when running (Meldrum, 2004, 2006). The fixed longitudinal arch of the human foot is an adaptation for endurance running, loading the well-developed calcaneal tendon as an elastic storage mechanism. The track is abbreviated to the ball of the foot at the metatarsophalangeal joints. Lacking a fixed longitudinal arch, the veren (and sasquatch) foot collapses into flexion at the transverse tarsal joint when

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running, producing a "half-track."

The possibility remains that the footprint casts attributed to the *yeren* were fabricated, however it should be noted that they originate from a time before that particular cast from the Bluff Creek site was widely publicized (Krantz, 1992); certainly before any discussions of its significance for a proposed model of midfoot flexibility (Meldrum, 2004). Therefore, the notable similarity in morphology between the *yeren* casts and the type and referred material of *Anthropoidipes ameriborealis* may provide independent corroboration of the footprint evidence for an unrecognized bipedal hominoid with a circum-Pacific distribution.

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Figure 1. Satellite image of eastern Asia. Circle indicates region centered in Hubei Province, China, where numerous sightings of the *yeren* have been reported.



Figure 2. Some expedition members with Professor Zhou Gouxing (front row, second from right).



Figure 3. Eyewitnesses' impression of the appearance of the *yeren*.



Figure 4. Footprint casts of the *yeren* collected by Yuan Yuhao in the Shennongjia Reserve.



Figure 5. Distal view of the footprint casts illustrating the digits.



Figure 6. Comparison of the *yeren* footprint casts with a cast from the Patterson-Gimlin film site (Bluff Creek, California) attributed to the sasquatch (center).

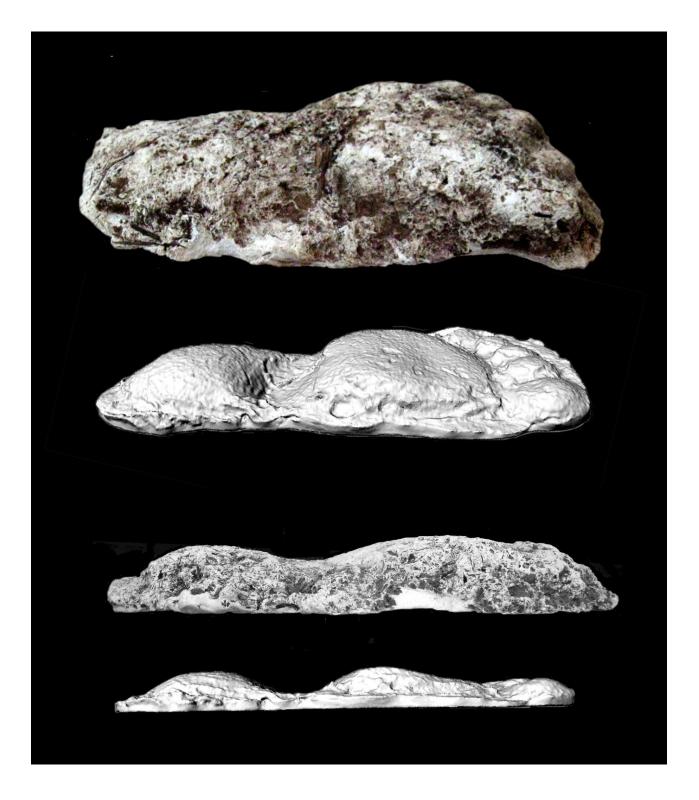


Figure 7. Medial views of the *yeren* footprint cast (above) compared with the cast from the Patterson-Gimlin film site (Bluff Creek, California) attributed to the sasquatch (below). Note the similarity in the midtarsal pressure ridge in each footprint.

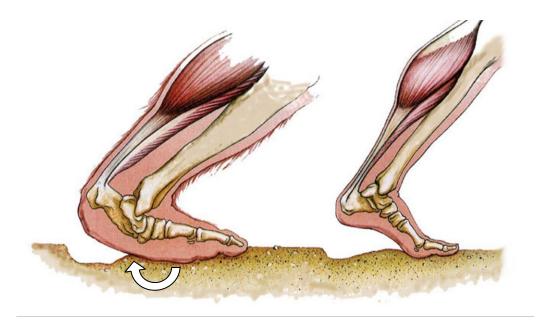


Figure 8. Inferred arrangement of the pedal skeleton and triceps surae in the *yeren* and sasquatch (left) as compared to the human (right) correlated with the presence or absence of the midtarsal pressure ridge (arrow). See text for discussion.



Figure 9. Footprint casts from Bluff Creek, California, made by Roger Patterson October 1967, constituting the type of the ichnotaxon *Anthropoidipes ameriborealis* MELDRUM 2007.



Figure 10. Footprint casts from the Patterson-Gimlin film site at Bluff Creek, California, made by Bob Timus in 1967, constituting the referred material of the ichnotaxon *Anthropoidipes ameriborealis* MELDRUM 2007.



Figure 11. Casts made by Meldrum in 1996 near Walla Walla, Washington, comparing a full-length footprint with a "halftrack" illustrating the flexibility at the transverse tarsal joint.