Supporting Information. Odonne, G., M. van den Bel, M. Burst, O. Brunaux, M. Bruno, E. Dambrine, D. Davy, M. Desprez, J. Engel, B. Ferry, V. Freycon, P. Grenand, S. Jérémie, M. Mestre, J.F. Molino, P. Petronelli, D. Sabatier, and B Hérault. 2019. Long-term influence of early human occupations on current forests of the Guiana Shield. *Ecology*.

Appendix S3.

Description of the sampled NA sites

Baf: The Bafog site

This plot is located at the summit of a hillock covering 4 hectares (between 15 and 35 m above NGG). This hillock has a migmatite foundation covered by the Coswine formation. The soil is brown to yellowish brown and after 100 cm gains a reddish colour associated to a lined iron nodules. In March 2010, they have been surveyed because of possibly modified soils at the latter plot. However, we did not encounter any ceramics on the surface. Although we did not find any artefacts, we sampled two charcoal fragments taken from a geological test-pit dug at the summit of Plot 4. The results presented calibrated radiocarbon dates from the second and fourth century AD. These are rather old dates for the Lower Maroni River area and correspond perhaps to contemporaneous occupation along the Maroni River, situated on the Holocene river terraces.

NouGP: Nouragues Grand Plateau

This plot within the Nouragues Natural Reserve is located upon the Paramaca Formation and the former upon migmatite Caraïbes Formation. The plot of Grand Plateau was located in a slope of a volcano-sedimentary Paramaca Formation (Choubert 1965). Soils were clay and exhibited a deep vertical drainage. They contained around 30% (by volume) of gravels of iron duricrust. Charcoal is abundant at this plateau as had been attested previously by Christophe Tardy who suggested a paleofire for this particular reserve between 800 and 1000 BP (Tardy 1998:306). Whether this is related to a drier climate remains to be determined. In November 2011, an archaeological pedestrian survey has been conducted and this did not yield any archaeological artefacts while other sites have been recognised within the perimeter of the Nouragues Natural Reserve at other occasions (Tardy 1998).

Par18 and Par6: Paracou

The Par 18 plot was located on the slope of a Bonidoro schist formation. Soils were mainly sandy loam to sandy clay loam and exhibited superficial lateral drainage. The Par6 plot was located on the hill of a Bonidoro schist formation. Drainage conditions of soils depended on their topographical positions. Soils with vertical drainage until 100 cm depth, and with the highest clay content (clay texture) were observed on the upper part of the hill. Soils with superficial lateral drainage were observed along the slope, mainly in the upper part of the slope, or in the middle part. Hydromorphic soils with the lowest clay content (loam texture) were observed on the lower slopes or in the bottomlands. In March 2009, an archaeological pedestrian survey has been conducted at Paracou and the 2 plots did not yield any archaeological artefacts while other sites have been recognized within the perimeter of the Paracou station.

Slav: Saut Lavilette

The reference plot of 6 hectares is located upon a hillside of the Montagne Tortue (between 120 and 130 m above NGG) of the Migmatite Caraïbes Formation. The soils of this plot are predominantly clayey with a high level of large iron nodules corresponding to the emergence of the duricrust at about 100 cm in depth. No archaeological material was observed here.

Tib: Tibourou

The plot was located at the hilltop of a Bonidoro schist Formation. Soils were clay and exhibited vertical drainage at least until 100 cm depth. They contained gravels of iron duricrust, around 20% (by volume) between 0 and 100 cm depth, then around 40% between 100 and 180 cm depth. In March 2009, an archaeological pedestrian survey has been conducted at Tibourou and this did not yield any archaeological artefacts.

Trin: Trinité National Reserve

The plot was prospected in October 2012. It was located on a plateau far from any river. Soils were mainly clayey. An archaeological pedestrian survey has been conducted and did not yield any archaeological artefacts. Although several artefacts have been localized within a 10km distance.