

TABLE 13.—MEASUREMENTS (IN MM) OF THE ASTRAGALI OF *Smilodon gracilis* FROM HAILE XV A AND PORT KENNEDY.<sup>1</sup>

	Haile XV A UF 17496	Port Kennedy
Length	41.6	48
Width	45.2	38
Width of trochlea	28.7	27
Vertical diameter of head	18.7	17
Transverse diameter of head	26.6	25
External elevation of trochlea	21.1	22

<sup>1</sup> Measurements after Cope (1899).

humeri of *Satherium* from the Hagerman local fauna of Idaho (Bjork 1970). In this respect the Haile specimen agrees more closely with specimens of living South American *Pteronura* (Table 12). In the dimensions of the metatarsals and in most other respects, however, the three samples are remarkably homogeneous. The distal width of the Haile humerus likely would be greater were it not for the pathological condition of the medial side; the bone has turned distad and narrowed and is associated with much osteoporotic tissue. This anomaly does not seem to have affected either the articular surface nor the entepicondylar foramen, which are located laterally and proximally, respectively, to the affected area. The most impressive features that distinguish the Haile XV A specimen from the Hagerman skeleton (USNM 23266) are the much greater medial dimensions of the shaft and the deeper and wider ectepicondylar ridge. In all respects, however, there are strong similarities among the Haile sample and the genera *Satherium* and *Pteronura*.

FAMILY FELIDAE  
*Smilodon gracilis* COPE 1880

**MATERIAL.**—UF 17496: right tibia (distal end) and right astragalus; UF 17498: right metacarpal II.

The Haile material presumably is all from a single medium-sized animal. All three bony elements were found together, the tibia and astragalus articulate well, and the material is similarly preserved. The material is referred to the genus *Smilodon* on the basis of two characters (see Merriam and Stock 1932): (1) the presence of the astragalar foramen; and (2) the medial facet for the calcaneum and the facet for the navicular are merged.

The Haile XV A sabercat was very small and was similar in size to *Smilodon gracilis*. A comparison of the measurements of the astragalus from Haile XV A with those of the astragalus of *S. gracilis* from the Port Kennedy Bone Bed (Cope 1899) shows a close correlation in size (Table 13). Inasmuch as *S. gracilis* is the only small species of *Smilodon*