ZOOLOGY.—*A new kinkajou from Mexico.*[1] E. W. NELSON and E. A. GOLDMAN, Biological Survey.

In reviewing the kinkajous of Mexico (*Potos flavus* group) the writers have noted characters which seem to warrant the recognition by name of the geographic race inhabitating the region of the Yucatan peninsula. The new form is described as follows:

Potos flavus campechensis subsp. nov.

Campeche Kinkajou

Type.—From La Tuxpeña, Champoton, Campeche, Mexico. No. 181266, ♀ adult, U. S. National Museum (Biological Survey collection), collected by Percy W. Shufeldt, February 12, 1913. X catalogue number 10234.

Distribution.—Campeche, Tabasco, northern Guatemala and probably all of Yucatan peninsula; limits of range unknown.

General Characters.—A light-colored, medium-sized subspecies, very similar in general to *Potos flavus chiriquensis* of western Panama, but lighter in color, the head, and front and sides of legs and feet less shaded with dusky; skull narrower and differing in detail. Similar in general size to *P. f. guerrerensis* of western Mexico, but upper parts less overlaid with dusky; cranial characters distinctive. Differing from *P. f. aztecus* of the Gulf slope in Vera Cruz mainly in decidedly smaller size and lighter color.

Color.—Type: Upper parts in general near clay color (Ridgway, 1912), purest on face, flanks, and outer sides of limbs, the top of head and back thinly overlaid with brown; under parts, including inner sides of limbs and under side of tail near ochraceous buff, becoming brownish abruptly along a narrow median line on the abdomen and a spot immediately behind the naked gular patch; ears thinly clothed with light buffy hairs; feet about like outer sides of limbs, not distinctly dusky as usual in the group; tail above about like back, becoming more brownish toward tip.

Skull.—Similar in general form to that of *P. f. chiriquensis*, but braincase narrower; frontal region rising similarly high anteriorly but somewhat more depressed behind postorbital processes; postorbital processes more compressed or flattened antero-posteriorly, less rounded and peg-like; bullae usually larger, more inflated anteriorly; dentition very similar. Compared with *P. f. guerrerensis* the skull is relatively narrower, more elongated; frontal region higher anteriorly, more depressed behind postorbital processes (frontal profile more evenly arched in *guerrerensis*); audital bullae much less inflated. Differing from *aztecus* in decidedly smaller size.

Measurements.—Type: Total length, 997 mm.; tail vertebrae, 513; hind foot, 90. *Skull* (type): Greatest length (median line), 95.4; condylobasal length, 88.2; zygomatic breadth, 60.8; interorbital breadth, 20; postorbital constriction, 18.8; breadth across mastoid processes, 47.2; breadth of braincase, 37.8; upper toothrow, front of canine to back of last molar (alveoli), 25.8.

Remarks.—In general combination of cranial characters *P. f. campechensis* tends to bridge the gap between *P. f. chiriquensis*, of which over 20 specimens have been available for comparison, and the more northern representatives of the *Potos flavus* group. The skull is more slender, however, than usual in the nearly related forms, and the lighter coloration appears to be distinctive.

[1] Received October 18, 1931.

Pallid coloration, apparently associated with general aridity, characterizes a considerable number of the animals of the Yucatan peninsula region and the representative there of *P. flavus* is, apparently, no exception.

Specimens examined.—Total number, 4, as follows:

Campeche: La Tuxpeña (type locality), 1.

Tabasco: Las Minas, 1 (skull only)

Guatemala: Perdida, Peten, 1 (skull only); northern Guatemala (without definite locality), 1.

PROCEEDINGS OF THE ACADEMY AND AFFILIATED SOCIETIES

THE ACADEMY

242D MEETING

The 242d meeting of the ACADEMY was a joint meeting with the Society of Sigma Xi, and was held in the Auditorium of the Interior Department Building, F. Street, between 18th and 19th Streets, on Monday, October 26, 1931. About 400 persons were present. President N. A. COBB called the meeting to order at 8:30 P.M., and made the introductory remarks, then turned over the chairmanship to Dr. P. R. HEYL who introduced Professor WILLEM DE SITTER, Director of the Observatory at Leyden, Holland and Past President of the International Astronomical Union, who delivered an address on *The origin of the planetary system*:

The solar system shows many features that cannot be due to chance but must have an explanation in the origin of the system. All the planets move around the sun in planes that are inclined at very small angles to each other. They all move in the same direction. The satellites move around the planets in planes which again have small inclinations with the planes of their families and also in the same direction. The axial rotations of the planets and of the sun itself are in the same direction and the equatorial planes have again small inclinations from the orbital planes. All the orbits are nearly circular. The masses of the planets are small as compared with that of the sun. The masses of the satellites are small compared with those of the planets. The only two notable exceptions are our own moon of which the mass is as much as 1/80 of the mass of the earth and the rings of Saturn which are a formation that is unique in the solar system. Other exceptions, large inclinations and revolutions in the opposite direction, occur only at the very outskirts of the system or in subordinate systems. All these irregularities call for an explanation which must be found in the origin of the system.

The well known hypothesis, known by the names of Kant and Laplace, has held the field for over a century. It really consists of two hypotheses, namely, that the sun and the planets were formed by condensation from a gaseous nebula and that the planets were separated from the sun as a result of the centrifugal force due to rotation of this nebula. There are several objections to this hypothesis. In its original form it is supposed that by the rotation, a ring of matter somewhat similar to the rings of Saturn was thrown off from the equator of the rotating sun and that the planets were formed by condensation of matter constituting this ring, in one point of it. It has been shown by Darwin that this is impossible. But even omitting the ring as an intermediary stage, the hypothesis was shown to be untenable. Mathematical analysis proves that rotation can give rise to only two configurations, namely, either a double star or a spiral nebula, both of which exist in the stellar universe in many and great numbers. But rotation can never produce