

Editorial

Holotypes of recently described species of Mexican mammals: where should they be?

Contrary to conventional perception, hundreds of mammalian species continue to be discovered and described around the world (Patterson 2000; Reeder et al. 2007). Many newly discovered species have been found by field biologists in previously poorly surveyed areas (Ceballos and Ehrlich 2009). Hence, fieldwork and scientific collecting are responsible for many discoveries, especially in tropical and semitropical regions (Patterson 2002; Reeder et al. 2007; Ceballos and Ehrlich 2009). Given that evidence indicates that this trend will continue (Patterson 2002), mammalogists must have knowledge of all laws and regulations that pertain to scientific collecting of mammals (Sikes et al. 2016), including those cases where specimens collected in the field are subsequently recognized as new species.

In Mexico, activities of scientific collecting of specimens of wild flora and fauna (not only mammals) have been regulated particularly by the *Norma Oficial Mexicana NOM-126-ECOL-2000*. This regulation establishes, for example, specifications to obtain permits issued by the Mexican government for scientific collecting in the country. In addition, the *NOM-126-ECOL-2000* also regulates cases where specimens collected in Mexico are later designated as the name-bearing type of a nominal species (*i. e.*, the holotype):

"5.11. En caso de que el titular de una autorización de colecta científica identifique que el material biológico colectado incluye una nueva especie depositará al menos el holotipo en alguna institución mexicana o colección científica registrada mexicana y dará aviso de ello a la Secretaría [de Medio Ambiente y Recursos Naturales, SEMARNAT]."

"5.11. In case the holder of a scientific collecting permit identifies that the biological material collected includes a new species, it shall deposit at least the holotype in a Mexican institution or Mexican scientific collection and shall notify the Secretary thereof."

It should be noted that *NOM-126-ECOL-2000* is mandatory for all those persons who carry out activities of scientific collecting in Mexican territory and entered into force in April 2001 (*i. e.*, 60 days after the publication of this regulation). Consequently, all specimens collected in Mexico after April 2001 (using collecting permits provided by the Secretary), which are later designated as holotypes of a new species, should be housed in Mexican institutions. As an example, I describe the case of a species of rodent recently described from Nayarit, Mexico. In 2011, some individuals of pocket gophers were collected in Sierra del Nayar. Later, genetic analyses revealed that those individuals represent a previously unrecognized species, *Thomomys nayarensis*. An adult male was designated as the holotype (Louisiana State University Museum of Natural Science, LSUMZ 36794, Mathis et al. 2013). Given that pocket gophers were collected using a collecting permit issued by the Secretary, the holotype of *T. nayarensis* was properly sent from LSUMZ to a Mexican institution (Colección Nacional de Mamíferos, Universidad Nacional Autónoma de México, CNMA 45745).

Here, I specifically highlight the specification 5.11 in the *NOM-126-ECOL-2000* because fieldwork is far from over and many more mammalian species await discovery in Mexico (Sánchez-Cordero et al. 2014). The discovery of at least four species of Mexican mammals whose holotypes were collected during this century support this idea. Unfortunately, this regulation is unclear in the case of someone other than the holder of the collecting permit can later designate as holotype a specimen, which should be clarified in future modifications of this regulation. Despite this, I hope that this letter serves as an invitation to students, investigators, and field technicians to become familiar with Mexican official regulations regarding the discovery and description of new species in the country.

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