

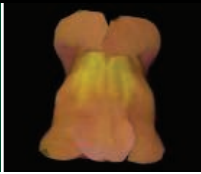
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## LETTERS

edited by Etta Kavanagh

### Captive Breeding and a Threatened Gecko

IN THEIR LETTER “SCIENTIFIC DESCRIPTION CAN IMPERIL SPECIES” (26 MAY, p. 1137), B. L. Stuart *et al.* warn that scientific description can draw attention to newly described species attractive for hobbyists, which could lead to their overexploitation or even extinction. Although this scenario sounds plausible, and taxonomists should keep in mind the conservation impacts of their work, at least one of the three examples given is incorrect. The gecko *Goniurosaurus luii* from southeastern China was heavily threatened by hunting for pet trade and local medicine purposes and was probably extirpated from its type locality before it was scientifically described. The specimens of *G. luii* obtained from pet dealers and listed as *Goniurosaurus* sp. were studied by Japanese molecular phylogenetics before the official description (1). Lui, the collector of the holotype of *G. luii*, himself “became aware of the existence of *Goniurosaurus luii* and *G. araneus*” from “individuals who specialise in gecko collecting for commercial purposes” (2).

Stuart *et al.* also claim that immediately after being described in 1999, *G. luii* reached a breathtaking price of \$1500 to \$2000 per individual in importing countries. During the last few years, hobbyists

perfectly mastered the keeping and breeding of *G. luii* and closely related *G. araneus* and established numerous breeding colonies of both species. Recently, hundreds of captive-born juveniles have been available on the world pet market every year for about \$40 each, which has two important conservation consequences. First, there is no further demand on the imported, wild-caught animals. Second, as *G. luii* is a species with limited range still hunted for local medicine trade (3) and endangered by habitat damage (2), the captive population will soon outnumber the wild one and can serve as a guarantee that this species will survive at least in captivity with a potential chance for re-introduction.

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2. L. L. Grismer, B. E. Viets, L. J. Boyle, *J. Herpetol.* **33**, 382 (1999).
3. K. S. Lee, M. W. N. Lau, B. P. L. Chan, “Wild Animal Trade Monitoring in Selected Markets in Guangzhou and Shenzhen, South China 2000–2003” (Kadoorie Farm and Botanic Garden Corporation, Tai Po, Hong Kong SAR, 2004).



A *G. luii* gecko

#### Response

OUR LETTER USED THREE ASIAN HERPETOLOGICAL examples to illustrate the point that publishing scientific descriptions of new species may inadvertently facilitate their overexploitation by advertising “novelties” to hobbyists and providing detailed locality information to commercial collectors. Kratochvíl correctly notes that one of our examples, the gecko *Goniurosaurus luii*, was already being heavily harvested in China for sale in the international pet trade (1, 2) prior to its description as a new species (1). However, immediately after being described, its value in the U.S. pet trade jumped from approximately \$500 under an older name to approximately \$1500 under its new name as a result of increased demand from hobbyists seeking a unique addition to their collections (the \$2000 quote in our Letter referred to a second reptile example, *Chelodina mccordi*, provided in the same sentence). Thus, we feel that *G. luii* remains an

appropriate example of how scientifically describing a new species can unintentionally fuel its commercial exploitation (3). It is fortunate for *G. luii* that demand for wild-caught individuals has now diminished, owing to the availability of inexpensive, captive-born individuals produced by hobbyists. The conservation merits of unregulated, private, captive breeding programs are beyond the scope of our Letter, but it does seem that *G. luii* paid a high cost for the end result of inexpensive, captive-born substitutes in the pet trade.

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1. L. L. Grismer, B. E. Viets, L. J. Boyle, *J. Herpetol.* **33**, 382 (1999).

2. H. Ota, M. Honda, M. Kobayashi, S. Sengoku, T. Hikida, *Zool. Sci.* **16**, 659 (1999).
3. For additional plant and animal examples, see L. Guterman, *Chron. Higher Educ.* **52**, A12 (21 July 2006).

### Roles of CITES in Protecting New Species

IN THEIR LETTER “SCIENTIFIC DESCRIPTION can imperil species” (26 May, p. 1137), B. L. Stuart *et al.* warn of a dilemma faced by scientists who publish the first scientific description of a new species. Revealing geographical locations in the publication can guide unscrupulous collectors from the international pet trade to the species, which could lead to a rapid decline in population size and even extinction.

To prevent this, Stuart *et al.* suggest that taxonomists should work closely with relevant governmental agencies. The problem