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BOOK REVIEWS

"LATIN AMERICAN MAMMALOGY": A LATIN AMERICAN MAMMALOGIST'S VIEW

Mares MA & D.J Schmidly

Eds. (1991) Latin American mammalogy: history biodiversity, and conservation. University of Oklahoma Press, Norman, Oklahoma, XVIII + 468 pp. US$ 49.95 (hardbound) plus shipping & handling. Checks should be payable to the Oklahoma University Foundation, and orders should be mailed to the Oklahoma Museum of Natural History, 1335 Asp Avenue, Norman, Oklahoma 73019-0606, U.S.A.

According to the Preface, this book is a sequel to Mares & Genoways' (1982) highly successful "blue book," complementing it in aspects that were scantily or definitely not covered there; namely, history, biodiversity, and conservation. Of course, the latter two topics have only recently started receiving attention from mammalogists, and the first one demonstrates the increasing maturity of the discipline: when one starts thinking about origins, ancestors and forerunners, becomes humbled by the foresight of the ancient few and the follies of the numerous contemporaries. Due consideration to the history of Mammalogy makes us all a little wiser and is therefore a welcome complement.

The book is organized into those three major sections mentioned in the subtitle, though conservation is split into policy & management, and education, thus yielding four parts. Overall, history takes up 74 pages out of 454 (main text), that is, 16% of the total. Biodiversity (and biogeography) account for 159 pages (35%). Part II deals with conservation policy & management in 118 pages (26%), and part IV (conservation education) is dealt with in 103 pages (23%).

Each of the four sections is preceded by an overview that is translated into Spanish. Every chapter has a summary, which is also translated into a Spanish resumen. The presentation and format of the book is attractive, same as the typesetting. The quality of the graphs and photos (black & white only) is uneven, probably owing to the different means at hand to the contributors rather than to the publisher. All headings, subheadings, and captions are perfectly standardized, including references in the literature cited sections. About the only instances of non-standardized usage are the omission of zeroes before decimal points for P-values listed in pages 299, 300, and 302. It is funny that every time this book is cited (p. 73, 95, 223, 225, 226, 276, 321, 412, 413, 414, 415, 452, 453, and 454) it is stated to have 480 pages when in fact it has xviii + 468 = 486 pages!

The text is remarkably free of typographic errors (I will not bother to list them), but there are a few sentences that should have not escaped the attention of the editors, such as "Neotropical South and Central America" (sic) in page 295, paragraph 2; or "The mean *annual* rainfall for the region is 1,476 mm *per year*" (emphasis mine) in page 296, paragraph 1.

A problem that will be noted by native Spanish speakers is that generally all translations have frequent typographical errors, lack many accents, contain orthographic mistakes (e.g., escazo for escaso, travez for través, enpobrezido for empobrecido, cazeria for cacería, tazas for tasas, suceptibles for susceptibles, atravezando for atravesando), and use improper neologisms: sistématas for sistemáticos (p. 24), valuable for valiosa (p. 119), prospectos for perspectivas (p. 119), reportadas for documentadas (p. 193), extensiva for extensa (p. 275), taxas for taxa (p. 333), teorética for teórica (p. 426), and sumarizado for resumido (p. 426). Also, I am not sure what is the plural for hábitat: the translator offers habitates (sic) but we Chileans write it as hábitats. The translator uses decimal points (the English usage) instead of the correct decimal commas (the Spanish usage). Finally, all the translations are excessively literal; they are not in the style of the Spanish language. This is not simply nit picking: perhaps many Latin American will read only the Spanish overviews and summaries. If they think that some of these are substandard, they may think that some of the papers are substandard too. Or worse, if they think that the translations are wonderful, they will be learning an improper rendition of the Spanish language.

Although the preceding paragraph may sound too harsh, no offense is intended to the translator or the editors. The very effort invested in providing overviews and summaries in Spanish demonstrates a sensitivity toward non-English readers that I applaud.

Latin American Mammalogy: What is it?

I have an itching that I wish to get rid of as quick as possible, so that I move into the more objective

part of my review. The title of the book, "Latin American Mammalogy" may evoke different images to different people. Strictly speaking, from that title one would expect a collection of papers dealing with Latin American Mammalogy (sic). This book is about mammalogy, no doubt, but I wonder what is the meaning of the qualifiers.

Of course I understand fine that Latin America encompasses all the peoples south of the Río Grande (or Bravo, as the Mexicans prefer to call it), whose common denominator is having been ruled by either Spain or Portugal. That is why nobody would state that Guyana, French Guiana, Surinam, or the Lesser Antilles are Latin American countries (and I am in doubt whether Belize is such a country). By the rules of logic, I suppose that the peoples north of the Río Grande (or Bravo) should be known as British or Anglo-Saxon Americans, much to the dismay of the Quebecois, Hispanics, Afro-Americans, Asian-Americans, and Native Americans. Note that native Americans in Central and South America also resent being called Latin Americans, and (why not?) I myself might resent being classified as a latino, being in fact half Slav. Along the same line, and to the credit of the editors, it is worth pointing out that throughout the text Anglo-Saxon Americans are referred to as "North Americans". This is a giant step for peoples who commonly refer to themselves plainly as "Americans," much to the disgust of many other Americans who happen to live in Central and South America. I wonder how the Mexicans take the dichotomy established in this book (North Americans, as opposed to Latin Americans): they are *both* North and Latin Americans!

I am not raising this issue because it is popular in the aegis of multiculturalism and political correctness, which so far seems restricted to intellectual elites in the United States and (perhaps) Canada. I raise it because the convenient vagueness of the adjective in question pools together different realities and tempt toward issuing general recipes for the problems of the region –which may be quite different from one country to another. But, for the sake of brevity, let us accept that whoever we are or whatever is our ancestry, traditions or values, we are stuck with being Latin Americans.

Reading the book, one realizes that Latin American mammalogy has not been the exclusive realm of Latin Americans, but that most of it has been and is being investigated and disseminated by non-Latin Americans. Ten out of 36 authors (28%) in this book list Latin American addresses, and six out of 23 chapters (26%) have at least one coauthor with a Latin American address. I think that this is a meager representation (only one quarter on both counts) of Latin Americans on a book entitled as it is. In the Preface it is stated that this book emerged as an outcome of the joint meeting of the American (U.S.) Society of Mammalogists and the Asociación Mexicana de Mastozoología, held in Cancún, Mexico. We are also informed that 16 of the chapters resulted from the conference itself, and that additional seven were specially invited. Judging from this collection of papers, it looks as if the invited contributors were not Latin Americans. I wonder why this opportunity was not used to even out the representation of Anglo-Saxon and Latin Americans.

At this point, I should dispel any suspicion that I am behaving as one of those "sapos" that Michael Mares so aptly describes in one of the opening chapters. Indeed, I was personally invited by Mares to participate in the conference but I could not oblige. Thus, there are no personal grievances in my criticism. I do wonder, though, why some of the most competent mammalogists from Chile were not among the chosen ones to contribute invited chapters. As a list of potential contributors I dare offer the following established names (in alphabetical order): Francisco Bozinovic, Pedro Cattán, Luis Contreras, Luz González, Agustín Iriarte, Jaime Jiménez, David Martínez, Roberto Murúa, Pablo Marquet, Andrés Muñoz-Pedreros, Jaime Rau, Walter Sielfeld, Javier Simonetti, Angel Spotorno, Manuel Tamayo, Juan Carlos Torres-Mura, José Yáñez and Sergio Zunino (I don't think I left anybody relevant out of this list). According to Pine (1982), Chile was by then one of the most advanced (mammalogically speaking) countries in Latin America, and I think that ever since we Chileans have taken giant steps, strides, and even leaps in the last ten years to confirm that assertion (just check Journal of Mammalogy, Mammalia, or Acta Theriologica). I hope that the next time a similar book is published, some of the people listed above will be among the contributors.

I also wish to raise an issue of reverse discrimination: that affecting Anglo-Saxon Americans who have contributed greatly to the development of Latin American Mammalogy in the southern cone. Leaving aside Oliver Pearson, whose contributions to Argentine mammalogy are outstanding, and who probably was not available for contributing a chapter to this book, I am puzzled at one major omission. In my (not so) humble opinion, there are essentially three U.S. citizens that have made major inroads into fostering collaborative research with native Latin Americans, and that have contributed to putting both Argentina and Chile on the mammalogical map: Michael Mares, Bruce Patterson, and Peter Meserve. The two former are well represented in this book, but the latter is not at all. Was he, was he not invited to contribute to this volume? If not, it was at best a mistake, at worst an injustice.

Latin American Mammalogy: The book

I will now stop complaining about general issues. In what follows I concentrate on the different sections and chapters that compose the book under review.

Part I: Historical background, consists of four chapters. Rollin Baker opens this section with an historical resumé of the classification of Neotropical mammals. Unlike Hershkovitz (1987), who covered this topic from Columbus arrival until 1850, Baker extends his coverage up to 1957. This is a wonderfully synoptic view of the progress made in classifying Neotropical mammals by taxonomists from many nations. Of interest to Chileans is the recognition of Molina's work, who ranked second only to none other than Linnaeus in the production of currently valid names. Keith Sterling tells the story of two U.S. citizens (Edward Nelson and Edward Goldman), who together did pioneering work on the mammalogy of Mexico. This is an interesting tale on two regular guys who were part of the infantry that developed the discipline in the late 800's and early 900's. I hope some day we Chileans are informed of the story of Wilfred Osgood, the father of modern Chilean mammalogy (Sanborn's 1948 obituary is much too sketchy in this respect).

Knox Jones analyzes the academic branching pattern of a single mammalogical root in the U.S., that of Joseph Grinnell of the Museum of Vertebrate Zoology at the University of California-Berkeley. The rationale offered for including this chapter in a book on Latin American mammalogy is somewhat tenuous: that this particular story on the development of U.S. mammalogy is "worthy of attention of systematic and other mammalogists the world over, perhaps especially in Latin America" (p. 48, paragraph 1). Jones does not justify the latter part of this statement, but Grinnell (1877-1939) surely was an intriguing and charismatic leader of U.S. mammalogy from whom one may derive some inspiration. I was a Curatorial Assistant at the Museum of Vertebrate Zoology during the early 80's, and I swear that Grinnell's presence was still felt everywhere in the old building. We learned to revere the field notebooks that he, associates, and descendants left for posterity, as examples of painstaking care for details and illuminated perception of natural history. My fellow classmate of those years, Angel Spotorno, may attest to this as well. Anyway, Grinnell's academic descendants are literally hundreds of Ph.D.'s, unfortunately few of whom have become interested in Chilean mammalogy. I know of only two cases: Back in 1979, William Lidicker (wrongly spelled as Likicker in p. 55) participated in a meeting organized by Roberto Murúa in Valdivia. During late 1987 and early 1988, my former classmate Richard Ostfeld (himself one of Lidicker's students) came to do research on sea otters together with Juan Carlos Castilla. Other than that, I don't think that we Chileans have been in contact with the remarkable followers of Grinnell's "school." What bearing has this chapter on Grinnell and descendants on Latin American mammalogy? In isolation, none; in conjunction with the following chapter, very much.

Grinnell was an undisputed leader of U.S. mammalogy yet he is not known for having used his academic substantial weight in discouraging graduate students or "disciplining" critics or strays. Quite different is the personality of those who Michael Mares coins as "sapos" (sic, Spanish in the original). They are uncontested leaders of the discipline, who use their heavy weight to hammer down on underlings and strays the notion of who is the boss. These "sapos" are truly interested in the development of their science, but they want to be the one, only, and undisputed authority in the field. His/her associates will always be just that (but at least they will have an assured survival under the beneficial umbrella of their mentor) and his/her imagined enemies will receive relentless pressure until they cave in, migrate or die (academically speaking) in utter isolation. Poker-faced, "sapos" conveniently use the argument of nationalistic pride and patriotic honor when dealing with potential intruders from foreign countries. Mares must have observed very closely the life history and behavior of several "sapos" because he not only describes in great detail their development, ecology, and sociobiology, but even provides a key on "How to recognize a sapo" (p. 70, paragraph 5), which I found very perceptive. I run the key through my fellow Chilean mammalogists and was delighted to note that with one exception, we seem to be safe from this "sapismo" pest so far. The single exception did not actually key out as a "sapo" but as a "pirigüín" (tadpole), with delusions of metamorphosing into a "sapo" some day. After reading how much damage a single individual of this species may inflict on the development of the discipline, I think that we Chileans will carry on our duty to prevent the transformation of the "pirigüín" into a "sapo" (male, female, or else; we don't want to know), even at the expense of sending a terminator after it.

Part II: biogeography & biodiversity, consists of seven chapters. It opens with the contribution by Michael Willig & Elizabeth Sandlin, wherein they compare quadrat and band methodologies for assessing bat species diversity gradients and

turnover along the Americas. I found this to be an enlightening analysis focused on a relevant problem. In contrast, I wonder why did I have to suffer the long and rambling research report by Carleton Phillips and coworkers. I found it too myopic and overly technical in dealing with a just-so biogeographical issue involving two species of bats in the Caribbean (is this Latin America?). I offer my apologies to the authors for being son insensitive to the presumably obvious importance of their research, but I must state that this is one of the two chapters that I thought did definitely not belong in this book.

The following chapter woke me up to full attention. Bruce Patterson examines the role of biogeographic theory in dealing with down to earth conservation issues. He separates chaff from grain in single strokes. Of course biogeographic hypotheses make simplifying assumptions, he states, but there are at least some robust outcomes that do not depend heavily on parameter estimates. Patterson also makes the point that there is not enough time left for studying areas one by one (the empiricist approach), and that theory will have to compensate for missing time. I concur with this author in that we mammalogists would do better in offering cautious advice based on scant data and proper use of theoretical models, than in refusing advice until we gather all the relevant in-site data.

After being left in good spirits for having read the previous chapter, I was struck by William Boecklen's despairing litany on the limitations of biogeographical models. Come on!, I thought that nullism, Popperian falsifiability, and gone-stray iconoclasticism were part of the late 70's and early 80's!. These are the 90's and time is long overdue to stop flogging the horse that fell cataleptic several years ago! One of my major professors (I had two) was Robert Colwell, the most brilliant theoretical mind I have ever met, and I understand perfectly OK all the issues raised by Boecklen. That is why I dare say that the fad of finding everything faulty should fade away right away. It is always so much easier to find faults –particularly those committed by others– than to offer sensible solutions. I am not saying that Boecklen's neatly packed state-of-the-art chapter does not belong in this book, but that it should have preceded Patterson's chapter. That way, the former's message of despair would have been followed by the latter's message of hope.

The next three chapters lean heavily toward the empirical aspects of biogeography & biodiversity. Gerardo Ceballos & Daniel Navarro present a scholarly review of the diversity and conservation status of Mexican mammals. This is a solid piece of work that will likely represent a benchmark for future studies of the same type. These two authors have set a standard that will be difficult to excel. Fortunately, we Chileans have a similar high-quality assessment in the paper by Miller et al. (1983). I would take issue with the index that Ceballos & Navarro propose for ranking the conservation importance of different Mexican mammals. For one thing, the index is arbitrary, for another, it is unclear how some scores are assigned (e.g. "Trophic guild" in p. 176 means trophic level?, and if so, What is the score for a herbivore, a carnivore, or a scavenger?). But overall, I don't think this relatively minor issue should distract readers from gauging the merits of this chapter.

Although much more restricted in scope, the contribution of John Fa & Luis Morales is a good companion to the preceding chapter. These authors examine the conservation status of mammals in the Trans-Mexican Neovolcanic Belt, an incredibly complex physiographic area across southern Mexico. I was puzzled to find important discrepancies between this chapter and the preceding in stating the extent of protected areas in Mexico. Ceballos & Navarro plainly state (p. 191) that it is 2 million hectares (or 1% of Mexico's area), but Fa & Morales say that it is 7.44 million ha. Even when subtracting 1.27 million ha accounted for by historical parks and proposed areas, we are still left with 6.17 million ha of protected areas, over three times the figure reported by Ceballos & Navarro. Who is right? Some maladies are noticeable in this chapter: nowhere in the figures are presented the latitudes encompassed by Mexico (sorry for being so ignorant), and in some histograms the data bars exceed the scales (which is quite nonstandard usage). But other than that, I found this chapter by Fa & Morales generally good, well thought out and competently laid out.

In a commendably short chapter, Kent Redford & John Robinson recycle old information for a new purpose, that of determining the park size that assures the continuous existence of at least 500 individuals of a given mammal species. Besides the conclusion that most Brazilian parks (the only ones analyzed) seem to have an adequate size for most of the 32 species examined, I would like to call the attention of fellow Chilean mammalogists to the finding of the puma (*Felis concolor*) being the most demanding mammal, area-wise.

Part III: Conservation policy & management consists of six chapters. Virgilio Roig describes how desertification brought about by man since the Spanish conquest, has resulted in decreased distributional ranges for several of the most conspicuous mammals in the southern cone of South America. An important point made by Roig, which U.S. mammalogists keep forgetting, is that not all forests in South America lie in the tropical belt

(see also Redford et al. 1990). Cool, mesic, and xeric forests have been disappearing from the southern cone at unmeasured but likely high ratios. These losses, compounded by the small area occupied (a cone, after all, is shaped like a cone), render the conservation status of mammals associated to those forests particularly worrisome. I think Roig is to be commended for convincingly documenting this phenomenon. Of interests to Chilean mammalogists may be the reported distribution of the vampire bat (*Desmodus rotundus*), which according to Roig does not range in our territory any longer. This statement should be confirmed, though, because I had the faint idea that we still had vampires in northern Chile. Other "Chilean" mammals considered as threatened by desertification are the guanaco (*Lama guanicoe*), vicuña (*Vicugna vicugna*), culpeo (*Dusicyon* = *Pseudalopex culpaeus*), chilla (*D.* = *P. griseus*), and Geoffroy's cat (*Felis geoffroyi*).

A second interesting case in conservation is reported by Cleber Alho & Thomas Lacher, on pantanal mammals. The pantanal is found in the basin of the Paraguay River and is shared by Brazil, Paraguay, and Bolivia. These marshes are seasonally flooded, and because the prevailing soils are sandy, a complex mosaic of xerophytic and mesophytic vegetation occurs there. Although no mammal species seems to be endemic to the pantanal, the interdigitation of xeric and mesic vegetation and of terrestrial and aquatic habitats results in a rich mammalian fauna, even reacher than that of typical tropical areas. The message that non-tropical areas may harbor unsuspected biodiversity of mammals has also been forcefully conveyed by Mares (1992). As a temperate mammalogist living in a non-tropical country, I welcome contributions such as this by Alho & Lacher: too many times mammalogists obsessed with the tropics cannot see the (dryland) forests for the (tropical) trees.

In contrast to the two stimulating chapters just commented, the third (by Jose Fragoso), on the effect of logging on a Belize tapir, I found absolutely out of place in this book. This is a plain progress report that does not offer much more than what logically follows after the colon that should have been in the title: "it helps." So much for that. The following chapter is by Jorge Cajal and is a wonderfully synthetic and painstakingly documented work on the past and current distribution of guanacos and vicuñas. Although Cajal concentrates on the Argentine setting, he places his findings in the broader scope of neighboring countries, Chile included. At least for Argentina, the author shows that the total areas occupied by guanacos and vicuñas have been reduced by 44% and 24%, respectively. Cajal attributes much of this reduction to human interference, either direct (e.g., hunting) or indirect (e.g., sheep raising). As a Chilean mammalogist, I was interested to read that guanacos and vicuñas overlap distributionally "in the plateaus of Antofagasta and Copiapo" (p. 307). I have been to those areas and I have indeed observed guanacos and vicuñas together, particularly in the former area (I mean, in the same general habitat type and within sight of each other). This apparently is not the case in Peru.

The last two chapters of this section take us back to the U.S. The contribution by Jeffrey Jorgenson & Amanda Jorgenson refers to imports of CITES-regulated mammals from Latin America to the U.S. This is an interesting chapter that succinctly explains CITES and then examines the statistics on importations of live specimens and parts, products & derivatives (PPD's) of mammals. I wonder why the authors restricted their analysis to the period 1982-84; it is much too short (see Iriarte & Jaksic 1986). I hope that some day someone will come out with an analysis covering the period 1975 (when CITES was ratified) to present. Parenthetically, Shame on Mexican officials that have not allowed their country to become a party to CITES! Going back to the chapter under review, it may be of interest to Chilean mammalogists the observation that during the 3-year period examined, only four live individuals (of what?) were exported to the U.S. During the same period, however, 4,703 PPD's of Chilean mammals were imported into the U.S. What were these? They could have been furbearers skins, camelid-based wool garments, etc. Jorgensen & Jorgensen end up their chapter by noting that overall trade in CITES-regulated mammals has steadily declined over the years in the U.S. This is good news only if the U.S. has not been replaced by other countries a port of destination for Latin American mammals and their PPD's.

Finally, Alisa Shull describes the role of the U.S. Fish & Wildlife Service in preserving endangered mammals in that country. Although this agency and its mission have nothing to do with Latin America itself, I found it interesting to be informed about its charter and operational mode –particularly the process of "listing." I would strongly recommend reading this chapter to personnel of Chile's CONAF and DIPROREN, agencies that in our country reluctantly share a similar mission to that of the USFWS.

Part IV: conservation education, is composed of six chapters. Don Wilson proposes that OTS (Organization for Tropical Studies), currently a consortium of 40 U.S. universities, one from Puerto Rico, and four Costa Rican institutions, physically based in Costa Rica and administratively in the

U.S., is a paradigm for tropical ecology and conservation education programs. Too bad that Chile is not a tropical country, and thus we may not benefit from the experience gained by OTS since its founding in 1963. According to Wilson, there is much to be learned from OTS, and that the experience developed in over 25 years of existence "could easily be transferred to similar programs in other tropical countries" (p. 366). Once again, it looks like Chile, Argentina and Uruguay --not being tropical countries will not be enlightened by OTS wisdom (sigh). Not only are we sufficiently unlucky to be located in the last corner of South America, but in addition lack tropical forests! On second thought, perhaps Wilson was meaning "Neotropical" instead of "tropical" countries, and then this chapter deserves a second reading. Beware of the newest "ugly Americans" (cf. Pearson 1985), those who think that all of Latin America is a tropical rainforest!

Thomas Lacher and coauthors describe how international cooperation is helping the establishment of a program in Wildlife Management and Conservation at the Universidade Federal de Minas Gerais (Belo Horizonte, Brazil). Although of rather local interest, I think this chapter will become useful in providing the baseline against which the success of the above mentioned program could be gauged in, let's say, ten years from now (Good luck!).

I am at a loss in judging Patricia Morton's chapter on how to carry out an educational campaign to develop awareness of bat conservation in tropical America. By living in a country that is not "tropical" in any sense, I was tempted to skip this chapter, but duty made its call. I actually found this piece very well written and motivating; plentiful of good tips for organizations wishing to aid in the welfare of their favorite tropical organisms. At some points of my reading I wondered if this chapter was in self promotion of Bat Conservation International, but suspicions aside, I found that the guidelines proposed by Morton were indeed very good and adaptable to other organisms as well. The one thing that put me off was the sentence "This article will be of special interest to those wishing to organize their first conservation education campaign in a foreign country" (p. 390, paragraph 5). Surely she was not referring to Latin Americans going north to raise the consciousness of U.S. citizens. Statements such as the above may sound patronizing to some people in Latin America: Beware!

Jane Packard & David Schmidly tell us about the role that mammalogists should play in promoting graduate training that integrates conservation and sustainable development. Although the authors carefully restrict their advice to North American (U.S. and Canada?) universities, I found numerous words of wisdom throughout the chapter that are perfectly applicable to Latin American (Mexico included) universities. Packard & Schmidly present the view that North American universities should establish linkages with Latin American counterparts, so that graduate students in the former have an opportunity to understand in situ the sociocultural issues that necessarily have to be dealt with before getting across the message that sustainable development is "good for us" Latin Americans (unlike other occasions in which what we were told it was good --e.g., borrowing heavily from U.S. and European banks– turned out to be extremely bad). The authors seem sensitive enough on this issue as to state "Many students in host countries have never seen even a dead specimen of the species that North Americans ask them to protect." (p 408, paragraph 4). Right on target!

Paisley Cato analyzes the value of natural history collections in Latin American conservation. I guess because I was a Curatorial Assistant at MVZ, this chapter brought me fond memories and a reassessment of the value of the collections I helped curate. Cato does an excellent --and commendably concise as well– rendition of the myriad of information pieces that well sampled, well curated, and well conserved specimens may convey to the astute researcher. And she is not only referring to their typical use in taxonomy and systematics, but also for investigations about biogeography and genetic diversity, in education, and even in environmental assessment. This is recommended reading to museum curators and field mammalogists as well!

The final chapter of this section (and of this book) is by Janet Braun & Michael Mares. They call attention to the concept that natural history museums should not be mere repositories of dusty objects, but should instead become instrumental in promoting the development of a conservation ethic. Probably most museums do some of this through their exhibits, in-house education and research programs, and the dissemination of results in the literature. Braun & Mares are of the opinion that museums should do more. They make a compelling case for the establishment of outreach programs that take museum exhibits to the people, instead of waiting for them to attend at its central location. They further emphasize the importance of children education, who at tender ages are more susceptible of marveling at the wonders of nature. When grown up, these children may become advocates or even benefactors of the museums that once took the bother of reaching out to them. Together with the preceding chapter , this one I strongly recommend to museum curators everywhere (including, Ahem!, José Yáñez, Herman Núñez, and Juan Carlos Torres-Mura).

CONCLUSION

Now is time for a final wrap up. I have been candid in offering my criticisms and in praising what I found worthy. If I have been too opinionated and some authors feel misunderstood and/or insulted, I apologize. Perhaps readers and authors should do well in ignoring this review, and instead checking the more balanced one written by Peter Meserve (1991). If in writing this review I have not shot my own feet and my opinion is still valued, then I dare urge fellow Latin American mammalogists to purchase and read this book cover to cover. It is a worthy companion of Mares & Genoways' (1982) blue book, and complements its coverage in precisely those areas most needed of immediate attention. If you were able to gather the money for buying the blue book, don't be a miser now!

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