沉醉兜鍬

For the Love of RHINOCEROS *and* STAG BEETLES

Second Edition

增補版

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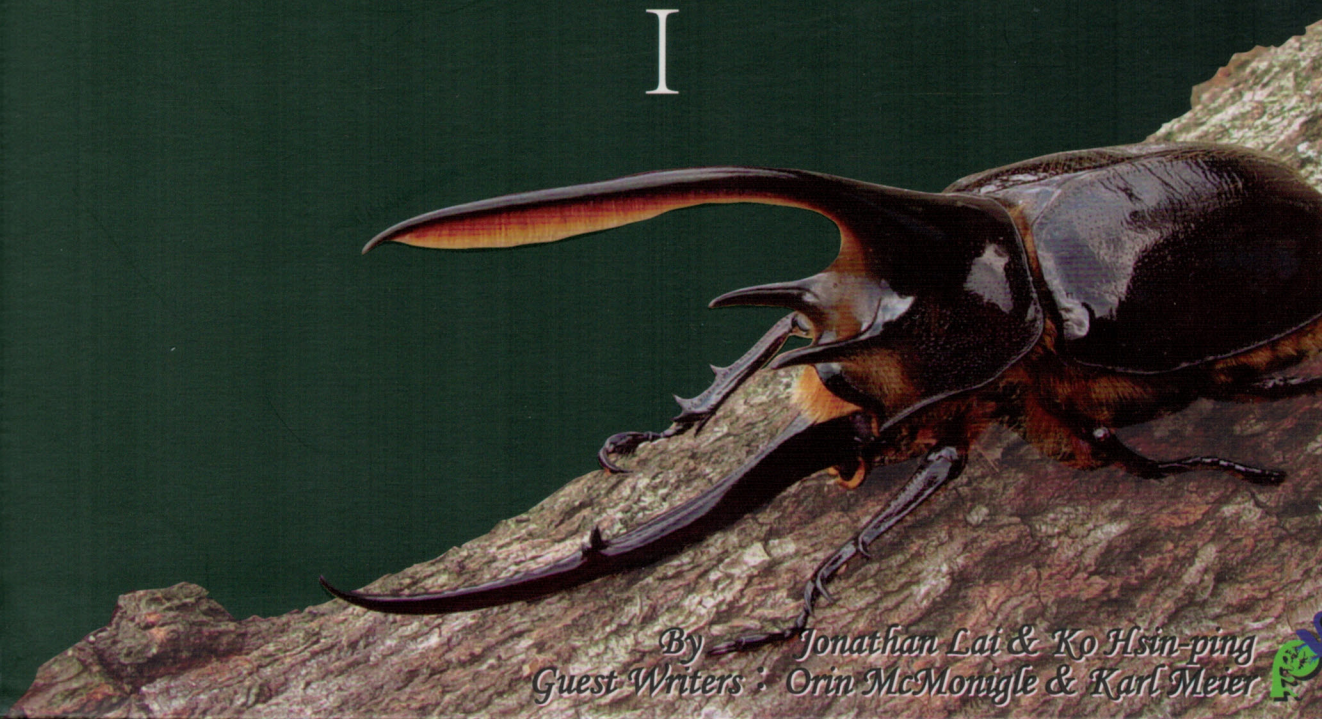

By Jonathan Lai & Ko Hsin-ping
Guest Writers: Orin McMonigle & Karl Meier

Second Edition

For the Love of Rhinoceros and Stag Beetles

Gratitude

I met with one of world's very best beetle breeders Ko Hsin-ping in February, 2005. After some discussion, we decided to join force and publish For the Love of Rhinoceros and Stag Beetles Second Edition. I thought the new edition would come out by the summer. But to make things as close to perfection as possible, it took three and a half years. We are deeply grateful to all those who helped and sincerely hope the new edition will bring more contributions to the beetle-breeding community.

We would like to thank (in alphabetical order) Cameron Campbell, Chang Jing-cho, Chang Ho-ming, Chang Li-tsan, Chang San-mei, Willy Chang, Chang Yun-fan, Jason Chen, Nomis Chuang, Chung Ming-chun, Gekko Dai, John Dicus, Dr. Everardo Grossi, Dr. Paschoal Grossi, Susan Gruner, Ho Chung-shiung, Masaki Horide, Huang Chung-dao, Insect Mall, Kuang Chin-yuen, Lai Chai-mai, Lauren Lai, Lai Pan-yen, Lee Buo-hao, Victor Lavstoka, Ralf Lin, Shau-shau Lin, Lin Shio-lin, Lu Chun-yi, Orin McMonigle, Karl Meier, Mo-ching Insects, Moku-sei Insects, Dr. Miguel Morón, Thomas Shohara, Takao Suzuki, Dr. Wang Chung-hsiung's lab, Wang Kun-tai, Wu Shih-yuan, Sophie Yang, and Katsuo Yokota

楊平世教授推薦序

Foreword by Dr. Yang Ping-shih

兜銹飼養的武功秘笈

首次翻閱到「沈醉兜銹」這本書是在誠品書店，書相當厚，圖片非常多，內容十分紮實，如不是身懷飼養兜蟲 (獨角仙) 及鍬形蟲絕技的人，決不可能寫出這樣的書；可是，翻尋作者大名：賴廷奇，卻又十分陌生，因為在台灣會寫蟲書的人雖然多如牛毛，但這些人我幾乎都認識，所以仔細翻看書中的簡介和部分文字內容，才知道這是一位在美國長大，在美國田納西州范登堡大學生物系畢業的年輕人，從小他就喜愛上甲蟲，尤其鍾情於兜蟲和鍬形蟲；匯集十多年的養蟲經驗和蒐集各種標本，訪談相關學者所寫成的一本書。由於這本書和市面上生態圖鑑式的書籍及一些蒐集整理文獻寫成的書大異其趣，所以對這位年輕人，我感到特別印象深刻，也使我對這位「蟲林高手」有了相當好的印象。

2008年6月底，我曾經指導過的碩士班學生柯心平到研究室找我，和他同來的竟是賴廷奇先生，而這也是我首次和他面對面溝通，探索他當年寫「沈醉兜銹」的心路歷程；當時才知道他也曾在華視主持過「大自然教室」，也入圍過金鐘獎兒童節目主持人，現在則在東森新聞擔任外電編譯。柯心平先生從大學時代就沈醉在甲蟲世界，對兜蟲和鍬形蟲的飼養就科班同學來

Top Secret of Rhinoceros and Stag Beetle Breeding

The first time I flipped through the first edition of this book was in a book store. It was a thick book loaded with photographs. The content was solid. Only a person with extensive knowledge in dynastines and lucanids could have written a book of this magnitude. Yet the name Jonathan Lai was not familiar to me; being an entomology professor, I basically know all those capable of putting an insect book together. It turned out, Jonathan was raised in the United States and a graduate of Vanderbilt University. As this book is fundamentally different from common identification guides sold on the market, this young man has given me an excellent and lasting impression.

In late June of 2008, my former student Ko Hsin-ping came to me. Standing next to him was Jonathan Lai and that was the first time I saw him in person. It was then that I learnt that he also hosted a nature show on national television and was nominated for Taiwan's most prestigious television award the Golden Bell Awards. As for Ko Hsin-ping, he's been lost in the world of

說屬「武功高強」級數，他的碩士論文是「擬食蝸步行蟲之分類及親緣關係研究」，是台灣首篇以形態及分子對台灣珍稀保育類動物擬食蝸步行蟲進行親緣關係探討的論文。由於他研究態度認真嚴謹，在口試時頗受口試委員們的肯定和好評。而在研究室內，他養滿了各種鍾愛的甲蟲和珍異小動物；由於他是科班出身，所以除博覽群書外，也讀專門的報告；是故，在飼養這些甲蟲時都是採科學方法，從飼養箱大小的選擇，飼養用的木屑，腐植土的選取、消毒，朽木菌種的選擇，和從卵開始到成蟲羽化過程中的觀察、記錄，甚至是否感染疾病、是否有昆蟲或蟎類的寄生，如何處理這些有害動物…等等，無不鉅細靡遺地做了記錄和分析，終極目的是如何養出又大、又長、又健康的兜蟲及鍬形蟲。由於他傑出的表現，目前他是國內多家昆蟲專門店的顧問；而他所培育出的甲蟲，特別是長戟大兜蟲及數種鍬形蟲，都是國內飼養尺寸最大的紀錄保持人。由於心平是用優生學方式培育甲蟲，所以他所養出來的兜蟲和鍬形蟲，不單是尺寸最大，品質也最好；而且他還自創品牌，建立產品履歷和證書，以示對自己的產品負責。由於他所飼養的甲蟲，全都是自己精心選育出來的，一些近親交配中不好的基因都被選汰掉，所以稱得上是台灣兜鍬飼養第一人，能有此得意門生，實亦與有榮焉！

然而心平的能力非僅甲蟲飼養而已，他在大學就讀時便是系學會的重要幹部，也是蜚譽國內「台大昆蟲營」的資深講師。在學期間為了推廣昆蟲科學教育，還創辦了「安妮的昆蟲世

beetles since an undergraduate and an expert in breeding rhinoceros and stag beetles. His master's thesis was on classification of ***Carabus nankotaizanus***. When he was still a graduate student, he kept all kinds of beetles and pets in the lab. Because he has a formal scientific background, and has read numerous scientific reports, all of his rearing techniques have scientific basis. From the size of rearing containers, type of substrate, strain of fungi, to disease control and life-cycle observation, everything is meticulously documented, with the goal to produce the largest and healthiest beetles. He is currently consultant for many of Taiwan's beetle stores and record holder for the largest individuals of many species of beetles. Because Ko Hsin-ping raises beetles eugenically, his beetles are not only big but of highest quality. His beetles come with certificates to guarantee quality. Because all of his beetles are rigorously selected, virtually all bad genes have been screened. Ko Hsin-ping is considered Taiwan's number one beetle breeder. I am extremely proud to have him as my former student!

Ko Hsin-ping's expertise does not stop at beetle breeding. He's been a leader since undergraduate and a senior lecturer for National Taiwan University's insect camps. He's also the founder of one of Taiwan's most popular insect websites Annie's Insect World. At the same time, he dedicates his time to the devel-

界」，這個網站是台灣歷史最久、瀏覽人數也是最多的昆蟲網站。即使他現在正協助媽媽做國際貿易，但仍進行大型寵物甲蟲的研發和通俗昆蟲學的推廣工作，這種認真執著的態度和敬業的精神，實足為年輕人的表率。

這十年來寵物昆蟲興起，但在國內由於法規及管理辦法不周全下，這個行業正面臨無法可管的窘境；所以，儘管愛蟲、養蟲人口多，產值也高，但如無法納入正常管理規範，飼養者、經營者都會面臨各種壓力，包括偷偷走私外國昆蟲進口、逸出後可能引發入侵種問題、寵物昆蟲可能攜帶病原、寄生蟲問題…；如此衝擊下這個行業就很難成為正常發展的產業。在日本，也曾經發生類似的狀況，後來日本在制定「特別外來生物法」規範下，這個行業逐漸納入正軌。在台灣，寵物昆蟲產值潛力甚大，和這個行業相關的養蟲、觀蟲設備、器材也都是亟待發展的新興產業；未來如果寵物昆蟲能納入管理、規範，則這些產品都有可能「反攻」日本市場及進入中國和其他國家市場。所以，心平目前所建立的各種大型甲蟲飼養履歷和建立室內飼養規範，也就成為這個行業在經營管理上的典範。

如今，這兩位從小就喜歡甲蟲的年輕人，在這一、二十年來以一步一腳印方式，把他們豐富的飼養甲蟲經驗寫成書籍，把全世界的兜蟲、鍬形蟲，連各個亞種也都一一介紹；同時把各種飼養方法，飼養材質、入菌及更換飼料時機，產卵、交配應注意問題，如何做好控溫和病蟲害管理，如

opment and promotion of pet-beetle industry. His serious attitude and professionalism should set example for the young people of Taiwan.

The past decade saw the dramatic rise of pet-beetle industry in Taiwan. But without related laws and management policies, this industry is walking in grey area. Although there are many beetle lovers in Taiwan and the pet-beetle industry has a high economic yield, without proper management policies, hobbyists and operators face pressures such as smuggling exotic beetles, environmental impacts caused by escaped beetles, diseases and parasites introduced by exotic beetles, etc. In Japan, exotic beetles are governed by "code of exotic species" and the industry is developing smoothly. Here in Taiwan, the pet-beetle industry is one with tremendous potential. As a result, Ko Hsin-ping's beetle management experience can serve as a guidance for the proper development of this new industry.

Today, these two fine young men who have fallen in love with beetles since little kids, have put together a book containing twenty years of solid experience. This book incorporates breeding techniques for world dynastines and lucanids in finest detail. Each of this book's forty three chapters chronicles the authors' love for rhinoceros and stag beetles. This book also contains Dr. E. O.

何製作標本，如何郵寄活體甲蟲，林林總總共分成四十三章，逐章詳細地和蟲友們分享他們寶貴的經驗。難能可貴的是在書中，也有他們和國際聞名的美國學者——生物多樣性大師E. O. Wilson對長戟大兜蟲保育的看法，和巴西昆蟲學家E. Grossi博士、P. Grossi博士，以及墨西哥昆蟲學家Morón博士針對長戟大兜蟲的分類交換意見；遇到大型兜蟲、花金龜幼蟲發生孢子蟲問題求教於台大昆蟲病理學家王重雄教授的過程，也都有詳細的記述。這種求知的精神和嚴謹的治學態度，同樣足為愛蟲人的師法。

這本書涵蓋各種兜蟲、鍬形蟲的飼養經驗，也兼具圖鑑的功能，厚度達468頁，共有850幅精美圖片，而且採中英文並列，堪稱為兜、鍬飼養的「武功秘笈」；相信這本「大」作問世之後必會引發學界及愛蟲人士的先睹為快的風潮！而能為得意門生——柯心平及電視金鐘獎兒童節目主持人入圍者——賴廷奇兩人合著的大作作序，的確與有榮焉，也期待大家都能給與掌聲和鼓勵。

國立台灣大學生物資源暨農學院教授

楊平世

2008.7.4

Wilson's take on the conservation of ***Dynastes hercules***. The authors also obtained first-hand information from Brizilian entomologists Dr. E. Grossi, Dr. P. Grossi, and Mexican entomologist Dr. Morón on the classification of ***Dynastes hercules***. This book also documents how coccidian infection was confirmed by Dr. Wang Chung-hsiung of National Taiwan University. The scientific spirit behind this book is definitely worthy of praise.

This major work on propagation of dynastines and lucanids is 468 pages and contains 850 full-color photographs. It may well be considered the bible on this subject. I am confident both scholars and hobbyists will want to get their hands on this book as soon as it's made available. It is my great honor to have the opportunity to write foreword for this major publication.

Professor of Entomology

National Taiwan University

Yang Ping-shih

July 4th, 2008

台北市立動物園昆蟲館館長推薦序

Foreword by Curator of Insectarium of Taipei City Zoo

甲蟲是昆蟲中種類最多的一群，也由於牠們具有如鐵甲武士般的堅硬的外殼，而深受小朋友的喜愛，尤其是兜蟲與鍬形蟲，牠們各具有像挖土機與老虎鉗的外觀，更是早期許多無法擁有玩具的兒童的童年玩伴，而近年來由於都市的發展與野外棲地的破壞，讓這些童年的玩伴日益減少，野外也不再多見，讓許多小朋友甚至不曾接觸過這些可愛的昆蟲，當然更無法體會大自然與生命的奧妙，所以身為昆蟲館的負責人，當然要思考如何把這種充滿魅力的昆蟲，推薦給大家，不過由於大多數的甲蟲喜歡躲藏於土壤或枯木之中，兜蟲與鍬形蟲的幼蟲期又很長，也形成了展示上的困難，因此在昆蟲館的展示中，其實並不討好。不過慶幸的是，這類昆蟲是很容易飼養與觀察的昆蟲，並不需要很大的空間及複雜的設備，只要參考一些甲蟲飼養的書籍，便可以開始進行飼養，同時也可以透過飼養與觀察的過程，了解生命發展的過程。

Children especially like rhinoceros and stag beetles because of their shape. Rhinoceros beetles are shaped like bulldozers and stag beetles are shaped like pliers. Unfortunately, due to land development and habitat destruction, it is becoming increasingly difficult to find these creatures in the wild. In fact, many urban children have never had the opportunity to get up close and personal to these fascinating animals and consequently appreciate nature. Being the curator of the insectarium, it is my duty to find ways to introduce these insects to the public. However, as most beetles like to hide in soil or leaf litter, it is not exactly easy to display these creatures. Fortunately, rhinoceros and stag beetles are easy to keep as they don't require an excessively large enclosure. With some guidance from books, these beetles can be bred and the miracle of life can be appreciated.

很高興，又看見沉醉兜鍬出版續集，在第一集中，作者已將其9年的飼養兜蟲與鍬形蟲的經驗，毫無保留地呈現給有興趣飼養的讀者，這次作者廷奇更邀請我在臺大昆蟲研究所的學弟，同時也是網站「安妮的昆蟲世界」的站長，柯心平先生，再度將二人16年來精心飼養的心血發表出來，再加上搭配精美與豐富的圖片與說明，讓讀者一目了然飼育的過程與技巧，當然也希望透過飼養的過程，了解昆蟲生態的奧秘，並且藉由了解甲蟲、喜愛甲蟲，並加入保育甲蟲的行列，所以各位喜愛甲蟲的大、小朋友，千萬不要錯過這本的圖文並茂的好書！

吳怡欣
臺北市立動物園昆蟲館館長
2008年7月6號

With joy, For the Love of Rhinoceros and Stag Beetles is now in the second edition. This time, author Jonathan Lai has teamed up with professional beetle breeder Ko Hsin-ping to offer their beetle experience of over 16 years. With detailed explanation and abundant full-color photographs, all breeding processes and techniques are fully disclosed. It is my hope that through keeping and loving beetles, the reader becomes a conservationist. For all those young and old who like beetles, For the Love of Rhinoceros and Stag Beetles Second Edition is not to be missed.

Wu Yi-shin
Curator of Insectarium
Taipei City Zoo
July 6th, 2008

「自然世界」站長推薦序

Foreword by Webmaster of Natural Worlds

金龜子和鍬形蟲絕對是最受青睞的甲蟲之一。除了整體上巨大的身軀以外、令人驚嘆的形狀和顏色一直讓牠們成為收藏家最熱愛的昆蟲。在過去，甲蟲愛好者幾乎只能收藏來自於遠方、已經乾燥的大型外國甲蟲。也因此，長久以來，這些甲蟲的詳細棲息環境和生活史需求都是一團謎。但是，今天一切改變了，因為人工飼育甲蟲的技術近年來突飛猛進。甲蟲愛好者不必再看著野外採集的標本過乾癮。今天，全球有數萬人在舒適的居家環境中飼育兜蟲和鍬形蟲。人工飼育兜蟲和鍬形蟲的活動在亞洲和歐洲最為盛行。但是，隨著人類越來越懂得欣賞這些不可思議的昆蟲，兜鍬文化也已經開始散播到世界每一個角落。

人工飼育兜蟲和鍬形蟲除了可以觀察牠們生活史的每一個細節之外，另外一個極大的好處就是，人工飼育可以解除野生族群先前面

Scarabs and lucanids are definitely among the most admired of all beetle families. Along with their generally large size, their multitude of striking shapes and colors have always made them some of the most popular insects with collectors of natural history material. In the past, coleopterists (beetle enthusiasts) nearly always had to settle for lifeless, preserved examples of large exotic beetles from far-flung corners of the world. Such specimens, although often beautiful and interesting, can hardly tell a beetle researcher about the complete biology of a species. Thus, for many years virtually nothing was known about the precise habitats and requirements necessary for such insects to undergo their full life cycles. However, this is no longer the case at all, as great advances in the captive rearing of these insects have been made in recent times. No longer does the beetle hobbyist have to rely on mere dried specimens collected from the wild to sustain their interest. Today, tens of thousands of people around the world enjoy rearing their own scarab and lucanid beetles right in the comfort of their own homes. The captive breeding of these insects is by far most popular in various Asian and European countries. However, it is beginning to take hold in other areas of the world as well, as a greater appreciation for these marvelous animals becomes more widespread.

Apart from being able to observe and research the entire life cycles of these insects from egg to adult, another great ad-

臨的龐大採集壓力。也因此，透過人工飼育的方式來取得標本是最具環保觀念的。蝴蝶農場已經行之有年，因為這個模式可以供應市場最頂級的標本，又不會對野生蝴蝶族群造成壓力。甲蟲也可以如此，但因為飼育甲蟲的勞力和時間遠遠超過飼育蝴蝶，因此專門為標本市場飼育甲蟲的人並不多。與其，飼育兜蟲和鍬形蟲變成了一種藝術，焦點放在養出最大最健康的個體。活體兜鍬被飼養在模擬原生態環境的觀察箱中，並且可以繁殖和自然終老。由於甲蟲算是小型動物，因此設計可以養活成蟲和幼蟲階段的室內生態箱並不困難。圖文並茂的「沉醉兜鍬」是第一本，極深入解說甲蟲飼育的書籍。「沉醉兜鍬」詳細探討，各種已經經過時間驗證的兜鍬飼育方式。我非常有信心，這一本重要的著作，不管是對新手還是玩家，在兜鍬飼育的領域裡，都會有極大的幫助。

卡麥隆・坎貝爾

CAMERON R. CAMPBELL

「自然世界」網站站長

http://www.naturalworlds.org/

vantage is that by captive breeding them, collecting pressure on wild populations can be eliminated. Therefore, captive raising one's own group of any species is a far more ethical and environmentally sound means of obtaining specimens. Butterfly farming has been practiced for many years to supply the dried insect trade with fresh, top of quality specimens without stressing wild butterfly populations through collecting. The same can be done with beetles, although because of the labor and time involved, very few coleopterists actually rear beetles specifically to supply collectors with preserved specimens. Rather, the rearing of scarabs and lucanids has become something of an art form, with the main intention being to produce adult beetles which are as large and healthy as possible. The beetles are allowed to live a normal, reproductive life in specially made habitats created to resemble their natural environment as much as possible. With relatively small animals such as beetles, designing indoor terrariums suitable for sustaining both the adult and larval stages throughout their entire lives is usually quite simple. This well illustrated book represents the first attempt to explain the fascinating bobby of beetle rearing in fine detail. Included are in-depth descriptions of the various methods which have proven to work well for a number of specific scarab and lucanid species, and I am confident that this important work will help both beginners and advanced enthusiasts greatly with their captive breeding efforts.

Cameron R. Campbell

Webmaster of Natural Worlds

http://www.naturalworlds.org/

柯心平自序

Foreword by Ko Hsin-ping

飼育行為和**生態保育**是否互相違背呢？由以下的幾個例子不難看出答案。世界上有許多野生動物，例如中國的四不像、牙買加的牙買加岩鬣蜥、賽席爾群島的亞達伯拉象龜、台灣的梅花鹿和櫻花鉤吻鮭等許多的珍稀物種，若非人工飼育而得以保種，否則牠們早已滅絕。我們可以舉幾個更積極的案例：在巴布亞新幾內亞以及北澳洲，政府輔導當地的居民以及原住民建立蝴蝶牧場，以半開放的方式飼養並復育瀕臨危險的各種鳥翼蝶，其資金由販售部分人工飼育個體所製成的標本而得。此舉不但回復了當地鳥翼蝶的數量，更讓當地居民了解維護雨林完整的重要性。美國佛州的鱷魚牧場不但成功大量繁殖曾經一度瀕臨絕種的美洲短吻鱷，更因為大量飼育並販售部分飼育品的皮革，使得鱷魚皮的價格大跌，盜獵事件也因此銷聲匿跡。由此可見在有計畫且合適的管理下，飼育行為不但不會與生態保育相違背，它更是生態保育必備且重要的一環。但生態保育所牽連之層面甚廣，本書僅就**如何於人工環境下飼育甲蟲**進行深入的討論與介紹。

沉醉兜鍬第一本的問世至今已經將近八個年頭，它在當年不但是震驚國際甲蟲界的一本巨著，更開啟了台灣甲蟲飼育的大門。回首這八年，台灣的甲蟲界有著爆炸性的發展，書中所出現的各式外國甲蟲，在當年的台灣甚至在日本都難得一見，但是今日卻已經是唾手可得，本增補版的出版更見證了這幾年台灣甲蟲界在飼育技術上的驚人成就。畢業於台灣大學昆蟲學研究所的我，接受過紮實的科學教育與訓練，因此對任何事物

Does captive breeding clash with wildlife conservation? Many species of animals, such as China's Peer David's deer, the Jamaican iguana, Aldabra giant tortoise, Taiwan's sika deer and landlocked Masu salmon, would have been long extinct if it weren't for captive breeding. In Papua New Guinea and Northern Australia, local governments help residents set up butterfly farms and raise endangered birdwing butterflies. The cost to run butterfly farms comes from revenues generated by selling part of captive-bred butterflies. Their actions restored butterfly populations and educated the locals about the importance of conservation. Captive breeding not only allowed the once endangered American alligator to explode in population, permitting the sale of leather from captive individuals also dramatically lowered gator leather price. Poaching is no longer practiced. With proper planning and management, captive breeding not only does not clash with conservation, but is an important part of conservation.

It's been eight years since the publication of the first edition of For the Love of Rhinoceros and Stag Beetles. In 2001, it shocked the international beetle breeding community and initiated Taiwan's pet-beetle culture. Eight years ago, living individuals of the beetles featured in this book were never before seen. Today, they are ubiquitous. The second edition of this book witnessed just how much pet-beetle culture has developed. I am a graduate of National Taiwan University and have received solid scientific

都著重於理性與科學的分析。這種態度與方法完全發揮在我**養甲蟲**的研究範疇中，我不只是把飼育甲蟲當興趣，更把它當成一個科學研究的題目。我仔細詳實地記錄著每一隻蟲，從出生到死亡。我的每一隻蟲有著自己的**身分證字號**以及完整的履歷。這些履歷提供了我大量的研究數據，使我可以科學性的去分析各種飼育過程中的變因，及其造成的影響。常常有人說我養蟲養得非常非常的**龜毛**，但這就是我的執著。因此本書中的任何數據，都是我們統計分析大量的樣本而得，絕非僅觀察少數個體就隨便下結論的流言和揣測。本書結合了賴廷奇（阿奇可是我養大兜蟲的啟蒙導師呢！）與我到目前為止的所有努力成果。我們出這本書不為名不為利，但求能留下一個自己的紀錄，並和大家分享我們甲蟲飼育的經驗、成果與態度。

我最終的希望是能將飼育甲蟲的技術回歸應用於自然保育的議題上，期望有一天能將我們的技術輸出，在世界各地也能出現像蝴蝶牧場一樣的甲蟲牧場。讓當地的野生甲蟲族群不再受到獵捕的壓力，更能讓居民與大自然共存共榮。

今天這本書能夠出版真的要感謝很多人，首先要感謝的是賴廷奇，謝謝他常常邀我一起試吃菌瓶和腐植土。如果沒有他一直壓著我準備書中的資料，我想我可能到現在還在偷懶；還要感謝我的爺爺、奶奶、爸爸、媽媽、姊姊，感謝他們這幾十年來對我這個只會**玩蟲**的小弟弟的包容與支持；當然還要感謝這幾年來一路陪著我養蟲、聊蟲分享蟲經的各位學長、學弟以及蟲友。最後要特別感謝台大昆蟲系的楊平世老師，感謝老師一直以來對我的訓練、栽培、信任與期望，使我在昆蟲這個領域能有今天的成果，謝謝老師。

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training. As a result, I do everything scientifically. To me, keeping beetles is not only my hobby, but also an endless scientific research. Each of my beetles is given an identification number and its life from birth to death is carefully documented. My beetles have generated a tremendous amount of data, allowing me to analyze all kinds of variables in beetle keeping. Some people feel that I've gone overboard with beetle breeding. But I insist it this way. Any number you see in this book came from an enormous sample pool. We simply don't draw conclusions from just a few isolated cases. This book combines everything Jonathan and I have ever come to know about beetle breeding. It is our goal to share our success with all those interested in this subject around the globe.

My ultimate hope is to be able to apply our beetle-breeding techniques on conservation. I look forward to the day when we can export our expertise and beetle farms exist in every corner of the world, a day when wild beetles no longer have to face collecting pressure and people coexist with nature in harmony.

I thank Jonathan for his constant demand of my beetle data. Otherwise, the second edition would still only be an idea. I thank my grandfather, grandmother, father, mother, sister for tolerating a kid who is so lost in the world of beetles. I thank all those beetle hobbyists who have helped me along the way. I especially thank Dr. Yang Ping-shih of National Taiwan University, for my accomplishments in the field of insects wouldn't have been possible without the training he's given me, the trust he's bestowed in me, and his high expectations of me.

Ko Hsin-Ping

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