Feedback

Conservation : an empty word?!

Dear *Feedback*,

I feel that I must earnestly respond to Michael Lau's refutation of Richard Corlett's 'empty forest' article where, in feedback of *Porcupine!* 26, he presents 'in-situ conservation' as 'the alternative to experimenting on an ad hoc basis'.

In essence, Richard made the appealing prediction that 'within 50 years forest will cover Hong Kong.' While acknowledging that secondary (or is it post-secondary?) forest covers much of the vegetated areas, he noted that some inaccessible or protected feng shui sites provide seeds of a support system for the slow return of a more biodiverse original vegetation. All good news … if true! Richard went on to argue that, some planned reintroduction of 'ecologically appropriate' vertebrates might restore ecological processes and, thus, help to put the cries of long lost mammals alongside a chorus of returning birds. In short, fill an empty forest with life and sound! As someone who has tried to sleep in a pristine Bruneian rainforest (yes the sultanate of Brunei Darussalam in north Borneo does, in fact, have pristine forest!) I could not agree with Richard more. Our Hong Kong forests are, at present, rather quiet and almost empty.

Michael was, however, rather critical of the model. Citing the generalist guidelines of IUCN/SSC Re-introduction Specialist Group 1998 and Dodd & Siegel (1991) on just some exothermic vertebrates, he contended that reintroductions were 'risky' and that because 'we still lack a conservation policy' (in HKSAR) our efforts in HK and southern China 'could be better spent in in-situ conservation'.

I would like to put a whole new spin on both the Corlett model and the Lau alternative. For far too long in Hong Kong environmental circles, people of all colours in the conservation spectrum have talked about more conservation here and more protection there and more laws (ordinances) everywhere to save our environment. Where has it got us? Where will it get us? The time has come for a bold new paradigm. The central emphasis today should be on eco-restoration not more 'conservation'. Indeed, the word conservation has developed a hollow sound. It may be empty. New life and energy must be put into our entire Country Park and Marine Park programmes. Give nature more time?! Not so apt anymore! How many more reports, theses and papers must we write and read about our degraded Hong Kong and south China ecosystems? Surely we have enough confidence in our ecology to take some brave, new steps in ecological repair. Such steps involve us in far more than giving nature more time. Restoration is an acid test for ecology (Bradshaw, 1987) and planned reintroductions an acid test for restoration. Besides, as Hobbs and Huennake (1992) have concluded, since nearly all ecosystems are likely to be nonequilibrial in the future we must be activists in determining which species to encourage and which to discourage. They go on to argue that we in conservation cannot just manage passively or for maximal diversity, but must be selective and tailor management to specific goals.

Need we in Hong Kong and within the DEB fear providing such much needed conservation leadership? No we do not! As Bush (2000) predicts, restoration ecology might be the next thrust for conservation. I totally agree. In the U.S., reintroductions within restoration ecology have helped to bring some key species back from the brink of extinction. These include the American bison and the gray wolf. Recent farming Journals in New Zealand (Straight Furrow April, June, August 2002) report numerous welcome case studies in avifaunal reintroductions as well as native rats (*Rattus exulans*) and bats and even wetas (a large grasshopper-like endangered insect) and frogs. Many of these cases have occurred in forest patches located on privately owned farms, where local governments (which today have trendy titles such as Environment Waikato or Environment Bay of Plenty) actively encourage farmers to both conserve and restore ecosystems. Indeed many species of the New Zealand national symbol the kiwi, a flightless, nocturnal bird with a mammal-like niche, have a better chance of survival as reintroductions in restored forest than in so called conservation forests run by DOC (Department of Conservation). Some more ecologically trained conservations have advocated farming kiwis, which too often in N.Z. today are depopulated by introduced feral predators. This, in essence, boils down to planned reintroductions in protected forest stands.

Applied to Hong Kong, we could have something like the Long Valley Protected Panda, flying squirrel or bamboo rat (take your pick?) forest. Perhaps, LVPF for short. Regenerating natural vegetation as exists in Hong Kong today offers, as Richard correctly argues, potential sites for exotic pests. Local forests, empty of local vertebrates, can present an easy ride to ecological dominance for exotic species. We may not be able to repopulate our regenerating local forests with the cute and cuddly such as the Panda … at least not for now … but we could and should try the noisy and functional. Perhaps gibbons and bamboo rats re-introduced today could be pathfinders for pandas tomorrow? Bold, brave, non-bureaucratic schemes such as this may do far more to win the hearts minds and imaginations of Hong Kong people than yet more hot air on paper in the futile form of a new conservation policy. Calls for new policies, better laws and planning have been the hallmark of conservations for decades (Revisit Morton 1979 and Hodgkiss 1979 to check this out if needed). Talk of Disneyland abounds in our Newspapers. But just imagine the positive impact on both ecological research and ecotourism if we had, say, a Jacky Chan Singing Forest in Tai

Po Kau. I do not, of course, have Jacky Chan in mind as the reintroduced mammal. He is here already. I have him in mind as the Sponsor and genuine community love and interest in restoration ecology as the outcome. Let's put a new heart into HK Conservation and fill this overused word with life.

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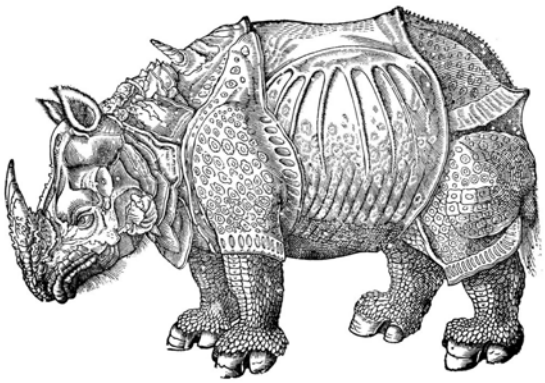


Species introductions . . . wooah there!

Dear *Feedback*,

I read with interest and some concern Richard Corlett's proposals for reintroducing certain vertebrates including several birds into Hong Kong, and boosting the population of certain others.

Having made a number of suggestions for reintroducing or introducing certain birds and mammals he closed his article by suggesting that "the target should be the restoration of as much as possible of the primeval plant and animal diversity of Hong Kong. . . this is going to require more imaginative extrapolation than many conservationists are currently comfortable with. But can anyone suggest a better alternative?"

I'll have a stab at it, at least for the birds. But I'd first like to suggest that the less than comfortable conservationists may have a point. When there is a whole range of species for which historical data exists, why focus on the maybes and the possiblys?

Extrapolation is a grown-ups' word for guessing. I would dare to suggest this is not a good basis for tinkering with our biodiversity, particularly when we are seeing the return and expansion of increasing numbers of fauna and flora through natural recolonisation. This is particularly true when the track record of species (both natural and extralimital) that have failed or succeeded in establishing viable populations throws up so many as yet unanswered questions.

Secondly there are a number of recently extinct and declining species for which we have good historical data, and for which work into reintroductions could be safely conducted without running the risk of introducing potentially harmful aliens or initiating programmes that are doomed to failure.

Obvious examples of recent losses (albeit non-forest species) are Watercock, Cinnamon Bittern and Pheasant-tailed Jacana, all of which formerly bred in lily and lotus ponds in the Deep Bay area, but have struggled among the scrap yards, container parks and Fairview Parks which replaced them. Provision of suitable habitat, which is likely to come as and when the various private reserves come on line, is likely to lead to these species' eventual upgrade from scarce migrants to breeding birds.

Similarly (and again a little off-track but worthy of consideration), there are historical records of Estuarine Crocodile and Water Monitor from Deep Bay. While reintroducing the croc would deliver a swift, if brutal, resolution to the seemingly insuperable problem of illegal mudskipper collectors, potential prey items may also include reserve workers and even (heaven forbid) bird watchers! – a definite no-no.

Water Monitors, on the other hand, have never been known to attack people, and instead would provide a distinct benefit. As one of nature's garbage disposal experts they will happily devour the carcasses of dead animals, birds and fish, and could help to reduce the occurrence of botulism, which threatens both the Black-faced Spoonbill and other waterbird populations at Mai Po. While the size of these lizards may be cause for concern among urban Hong Kongers, it should be noted that they thrive at Sungeh Buloh Reserve in similarly urban Singapore. Doubtless they would be fined, beaten and

generally firmly controlled at the least sign of disruptive behaviour – yet they are considered a major attraction of the reserve! Perhaps this is one time when following the example of Singapore could actually benefit Hong Kong.

Turning to Richard Corlett's suggestions for specific forest birds, the issues are rather more complex than his article implied, as an examination of the recent history of recolonisation and establishment by several species of forest birds demonstrates.

He suggested Grey–cheeked Fulvetta as Hong Kong's 'most obvious "missing vertebrate"'. Yet despite the fact that obviously escaped or deliberately released birds are recorded every year, they are yet to establish a self-supporting breeding population, while other babblers - exotics (Rufous-capped Babbler) and locals (White-bellied Yuhina) - of similar size and habitat preference have thrived or at least maintained viable populations.

It seems unlikely that direct competition with these species is a factor as the fulvetta has had similar opportunity to establish itself as these other species, when populations of all of them were significantly lower. It is also noteworthy that Rufous-capped Babbler and Grey-cheeked Fulvetta are often seen together in mixed flocks in lowland forest in Southern China (*pers obs*). More likely, there is some key biological element missing – possibly a food item or nesting niche - upon which the sustainability of the fulvetta depends. Until that missing element can be identified and, if appropriate, the situation resolved, any attempt at managed introduction is at best optimistic and at worst irresponsible.

The same holds true for Red-headed Tit. They were introduced around the same time as the successfully established Yellow-cheeked Tit. Yet they have all but disappeared. Without understanding why earlier populations of Red-headed Tit failed to take hold, introducing more seems somewhat cavalier.

And what possible justification exists for artificially boosting the population of Yellow-cheeked Tit without similar research into the limiting factors? A comparison of the forests on Hong Kong Island, where the population failed, and the Central NT, where the population is secure, seems like a good place to start

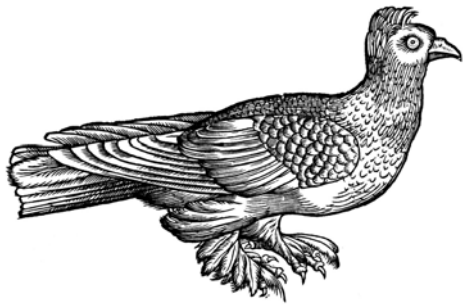
However, let there be no doubt that Hong Kong's forest birds are returning and proliferating, almost certainly due to the spread, maturity and resurgent diversity of our secondary forests. Leaving aside escapes and deliberate uncontrolled releases, the most obvious and easily explained mechanism of return is expansion by winter migrants that stay to breed.

The best example of this is Chestnut Bulbul, a forest-dependent species which has spread rapidly from small resident populations in the central New Territories massif in the last twenty years, supported by the arrival of varying numbers of winter migrants. At the same time Black Bulbul, which breeds in the same habitat in southern China (*pers obs*), has not become established. Why one and not the other? Simply put we don't know, although it is fair to say that greater numbers of Chestnut Bulbul arrive to winter. Intriguingly however, Mountain Bulbul, which is also found in the same Chinese reserves as Black and Chestnut Bulbuls, may have bred in Shing Mun (*Captain Wong: pers comm*), just months after up to six birds were noted overwintering in Tai Po Kau.

It seems highly unlikely that these species all benefit from the same elements in the expansion and maturation of our woodland. Rather, the process of key flora resurging, reaching maturity and flowering, fruiting and eventually dying will, either indirectly (by providing the necessary food or breeding site for a key food species) or directly, continue to reopen long-closed niches for specific forest birds. Examples of this in the last month alone include the discovery of a new species of butterfly – *Polyura eudanippus* and the first example of the shrub *Fissitistigma glaucescens* found in flower in Hong Kong (*R. Kendrick: pers comm*). Could it be that between them they provide the optimum food source for a currently unrecorded "missing vertebrate"?

Crested Goshawk and Besra have also expanded greatly, but Black Baza has never got past the stage of the odd breeding pair, while Chinese Goshawk remains a common spring migrant that has never bred. All occur together at Chebaling in northern Guangdong, but the latter has not become established here, despite the increasing availability of mature trees that would provide suitable breeding sites.

Other successes include Fork-tailed Sunbird, which is now common and widespread following its discovery at Tai Po Kau in 1959. However, Plain Flowerpecker which has been recorded on almost 20 occasions as a winter visitor since 1988, has not become established, although they are common at Ding Hu Shan. Lesser Shortwing has recently been proven to breed on Tai Mo Shan and Russet Bush Warbler has recently been recorded singing there in late spring and summer. Pygmy Wren-babbler is now heard and seen at a growing number of sites [including close to Daya Bay (*J Bryant: pers comm*)].



The other noteworthy increase is in cuckoos. Unlike the winter-visiting bulbuls, they are spring migrants and summer visitors. Chestnut-winged Cuckoo was formerly considered to be rather uncommon, but records have greatly increased since the 1980s. The Avifauna of Hong Kong suggests that their increase is closely tied to the spread of Greater Necklaced Laughingthrush (which it is known to parasitise). The increase of Hodgson's Hawk Cuckoo in the last five years may well be linked to the spread of Hainan Blue Flycatcher, which also breeds in mature secondary forest.

In response to the suggestion of introducing Greater Necklaced Laughingthrush, Streak-breasted Scimitar Babbler and Rufous-capped Babbler to Lantau one has to ask how you can safely establish whether the habitat is really suitable? It seems likely that their natural arrival on Lantau is simply a matter of time. Hwamei and Masked Laughingthrush already occur on Lantau. What's more the latter has been recorded flying across Victoria Harbour, suggesting natural colonisation is at least possible, even if laughing thrushes are hesitant to cross open spaces.

While some species of extralimital babblers (Blue-winged Minla, Silver-eared Mesia) have done well in Hong Kong, several others have not. These include Red-tailed Laughingthrush, (formerly on Tai Mo Shan), and Moustached Laughingthrush, Grey-headed Parrotbill and most significantly, Grey-cheeked Fulvetta. While the former three species all occur in northern Guangdong they have failed to establish viable populations and disappeared. The third has been dealt with above. Holding the middle ground are Chinese Babax and Vinous-throated Parotbill, neither of which have succeeded in expanding beyond the upper slopes of Tai Mo Shan.

I find the list of proposed phase 3 bird reintroductions somewhat arbitrary. Chinese Bamboo Partridge failed to recolonise in 1961. Do we know why? Bay, Grey-headed, and Rufous Woodpeckers all breed in Guangdong, have visited Hong Kong but never stayed. The absence of dead trees for making nesting holes may be one reason – typhoons probably cause them to fall much sooner than they would at less wind-affected inland sites. Yet Great Barbet, another large hole-nester manages well in secondary and even *feng shui* woodlands. More questions. Paul Leader (*pers. comm*.) has suggested that the impact of typhoons and the heavily maritime climate of Hong Kong many have a wide range of as yet unknown influences on our forest habitats.

Does it make sense to introduce Brown Dipper when Slaty-backed Forktail is present in such low numbers and numbers of wintering Plumbeous Redstarts have declined? What is missing from our streams? If Silver Pheasant is to be introduced, why not Common Pheasant? As discussed above it looks like Mountain Bulbul is managing fine on its own.

In summary, the presence of a given species in the nearest similar habitat is clearly not a sufficiently accurate method for determining whether that species has a reasonable chance of becoming self-sustaining in Hong Kong. Furthermore, in the light of an established pattern of natural recolonisation, managed reintroductions become harder to justify, especially when the data on past reintroductions (both deliberate and accidental) show such variable results.

I hope Richard Corlett enjoyed his opportunity to play God and fill Hong Kong with new and wonderful animals and birds. It is worth remembering that the last person to play God was God himself - and he had the benefit of omniscience when laying out creation. Since Richard's deity is yet to be confirmed it is hoped he will make the most of the next best thing - responsible science – and patience, before making any reintroductions based on "imaginative extrapolation".

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INVERTEBRATES

A new cicada record for Hong Kong —*Meimuna silhetana* (Cicadidae)

by Y.F. Lo and Fiona, N.Y. Lock

A cicada picture was taken by an AFCD Country Park Warden on Tung Ping Chau in fall 2001. The species was later found to not be one of the familiar cicada species in Hong Kong and a specimen was collected and sent to the Natural History Museum, London, for identification. The specimen was examined by the University of Amsterdam, the Netherlands