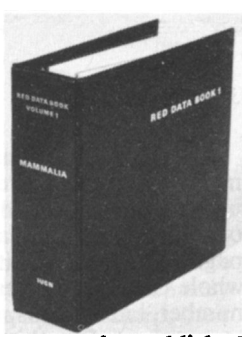


The New Red Data Book

Tom Harrison



The author of this analytical review of the recently published revision of the *Mammals Red Data Book* has been a member of the Survival Service Commission (SSC) of the International Union for Conservation of Nature and Natural Resources (IUCN) since 1963, and is one of the five members of the small advisory Alert Group within the Commission. A widely known naturalist and anthropologist, he spent 22 years in Borneo, where he was deeply involved in South-east Asian conservation problems. He also initiated, planned and carried out with General Charles Lindbergh one of the SSC's most successful projects—a two-man mission which persuaded the Philippines Government to act to save the tamaraw, described in *Oryx* 1969, pages 8 and 87. The SSC is officially responsible for the Red Data Books, the idea for the series being the invention of the chairman, Sir Peter Scott. There are now five volumes: Mammals, Birds, Amphibia and Reptiles, Freshwater Fish and Angiosperms.

International conservation HQ at Morges, by the cool Lac Lemman, are distributing their new edition of the *Red Data Book*—though neither cover nor title page indicates that there has been a previous version. The first *RDBs* were compiled in the less elaborately organised days of Sir Hugh Elliott and Joe Berwick by two non-professional naturalists, Noel Simon (mammals) and Colonel Jack Vincent (birds). Issued in 1966, followed by an admirable popular edition in collaboration with James Fisher, these volumes made, on their own quiet, personal merit, a major contribution to conservational thought and development by presenting, for the first time, the Survival Service Commission's approach to evaluating, systematically, objectively, information on all threatened species. Quickly the *RDBs* became Holy Writ in this field; the originals have seldom been importantly faulted.

Now, in less than a decade, we have the first in an ambitious set of revised, non-naturalistic versions. The first result, Mammals, more expensive and much more extensive, is the painstaking work of two qualified staff scientists of outstanding intensity, Harry A. Goodwin and Colin W. Holloway, though primarily credited to 'the Secretariat of IUCN with the advice and guidance of the Survival Service Commission'. Five active SSC members including Chairman Sir Peter Scott (instigator of the original *RDB* project but no longer mentioned) had not seen major material included, some involving overall policy matters. The advice and guidance, as far as we of the SSC are concerned, feels to have been largely spiritual, especially since 1970—not necessarily any the worse for that! Let us, then, see where the new brooms sweep clean.

There are three major and several minor preambles before the main text. One gives a list of all mammalian genera, largely irrelevant to what follows—e.g. four pages of bats, with 181 genera, of which only four appear in the book (none on red pages), two pages of Muridae with only one relevant following sheet, and five whole Orders not later represented at all. Each genus is given a code number, later inconspicuously repeated at the bottom corner of each taxon sheet. But this 26-page master-list carries no indication—in extensive unused space—as to which and how many are later covered and with what status, which seems to imply a certain thoughtlessness. Instead, a second Preamble (nine pages) lists all sheeted taxa; and a third, repetitively, every form for each separate political state (20 pages)—most listed are USA (30), India and China (each 25), Brazil (24), Australia (22); for several African states, surprisingly (perhaps misleadingly) few. This information could all advantageously be condensed by half or more with intelligent cross-referencing and simple coding. A solid taxonomic background is essential, but at 55 pages this is surely carried to excess. (The 1966 version had closely similar sheeted and country lists, but not the third, ‘luxury’ one).

Five Colour Categories

The main text, the meat, is a 2-in.-thick pile of sheets divided into five categories—red, amber and white for decreasing levels of threatened status; grey for ‘indeterminate’; green (a few) for out of danger now. On each sheet, the English (only) name comes first; below, Latin genus and species; under that, Order and Family. This still leaves the top right-hand corner with an inch or more of blank space (see suggestions below).

In view of the heavy taxonomic emphasis throughout, it is surprising to find apparent inconsistencies in sheet presentation. It is surely always relevant where more than one race is involved, to give clear data on the total species distribution, population and number of related subspecies. Thus the Pyrenean desman has ‘two races with extremely restricted range’, covered together on one sheet but not identified—both are currently threatened, I believe. The Ozark big-eared bat, *Corynorhinus townsendii ingens* of the middle west, is ‘a relict race’ with 100 survivors; *C.t. virginianus* of the southern US which rates a separate sheet is also termed ‘relict’. Neither sheet cross-refers to the other, while the type (and ? other) races are not indicated. There is an amber sheet for the cheetah as a species, *Acinonyx jubatus*, textually mentioning ‘African’ and ‘Asian’ races, not otherwise there identified, but both discussed in some detail, side by side, throughout. Then a separate red sheet repeats and elaborates (and at one point nearly contradicts) the amber for what is now (puzzlingly) called the Asiatic cheetah *A.j. venaticus*. For the ‘Asiatic’ wild ass five subspecies are listed on one amber sheet, containing much information repeated on two separate Indian and Syrian subspecific red sheets. Other sorts of overlap occur, for example, with red-fronted lemur (4 sheets), leopard (5), tiger (6), sika (5), Dorcas gazelle (3). On the other hand, six markhor subspecies,

three 'threatened with extinction', are all on one amber, while five races of Verreaux's sifaka are all on one red. Of the red uakari in the Amazon basin we only learn incidentally of several threatened races, not identified, well down one red sheet (under Habitat).

Visiting Morges in August 1973 to discuss and check these matters with my friend Dr Holloway (Goodwin has unfortunately returned to the US on retirement), he intelligently explained their system. I remain, as an outside reader, unconvinced of its consistency, while recognising the many difficulties.

Text Divisions

Below the taxonomic titles, the text page-face is regularly divided into eight (sometimes seven) sections—a big cut-down on Simon. As opener comes Status, evidently aiming to give a succinct statement on just that. Less than half these treatments in my reading so qualify. Three rabbits (Leporidae) may serve to illustrate. Unusually brief is this entry for Ryukyu rabbit *Pentalagus furnessi*, of which two status sentences say, 'Endangered, with a restricted range and limited habitat', and 'Endangered from loss of habitat and predation'. The repetitious 'endangered' is already proclaimed by its red sheet. But the volcano rabbit of Mexico, *Romerolagus diazi*, (also red) is initially described as 'rare'—the qualification for a white sheet, then as 'endangered'; and (odder) later on the page as 'one of the rarest animals on earth', though Gerald Durrell estimated over 1000 in 1969. With exactly the same opening ten words we get white-sheet status for the Assam rabbit. This little puzzle gains interest when, under the Population section, this (Assam) one is described as 'depleted to near extinction', though a white sheet indicates 'not endangered or vulnerable'; (cf. also Sumatra rabbit, below). Here and widely there is a somewhat less than objective scientific terminology, as for the wolf (amber) 'persecuted by man *beyond all reason*'—i.e. by mindless Canadians, one must suppose. (By the way, for the whales an entirely different status terminology is used: 'seriously depleted', 'grossly depleted' etc).

Single inconsistencies may be discounted, but against the scientific background of those impressively lengthy preambles, so many become disturbing in the opening section of actual text. They suggest inexact criteria and/or editorial inconsistency. A more deliberate, anxious trend is the inclusion, under Status, of sometimes relatively comprehensive statements on what *should* be done in the future, with repeated stress on 'further study of the animal and its ecological requirements' (Perrier's sifaka; white) or 'ecological survey is required urgently' (Cameroon clawless otter; red)—the latter with over half the entry on this point and the same theme elaborated again under a later section, (where we may return more appropriately below).

Distribution, the next section, is generally adequate, though sometimes slow to state clearly which region or country we are at. The Tana River Mangabey (monkey) mentions three rivers six times, unrecognisable for most readers, without indicating area (Kenya) until line 32. Trivial but characteristic of poor sub-editing is Kuhl's

deer, confined to Bawean Island, described here, unsized, as '200 km north of Java', but under Status as '5000 km², north of Java'. Or the dibbler (a coastal sandplain marsupial) whose discovery and rediscovery are both described, but neither dated nor with relevant dated reference. An amber sheet covering all three races of gorilla reads confusingly for the rarest (surely very threatened?) mountain form (*G.g. beringei*), while the pygmy chimpanzee is optimistically extended on to the Ruwenzori. And why is the highly endangered Mediterranean monk seal *Monachus monachus* not allowed for Libya despite the records in *Oryx* (May 1972) which are accepted by the reference quoted?

The information about the FPS's Operation Oryx is quite wrong and was not checked with the FPS. It was FPS, aided by a WWF grant, who took the initiative, organised the operation and negotiated the founding of the World Herd in Arizona, not IUCN/WWF: WAPT (Wild Animal Propagation Trust) had nothing to do with it.

Population is perhaps the key section, conservationwise. Most sheets present this information well (as did Simon). But there is, once more, noticeable variation in treatments, from terse to prolix. A fair example of the latter is the red sheet for Mexican grizzly bear, where Population duplicates Status ('possibly already extinct' cf. 'may already be extinct') with material appearing again later under Conservation Measures (where a possible surviving 'remnant' locality is discussed for the third time). Why not always a simple opening phrase or code, stating the approximate estimated population with suitable grading of reliability (I-V)?

Habitat, next, is the weakest of these four sections, particularly often duplicating previous data. The essential habitat information, when clear, could best be coded in under main types plus sub-types, e.g. RF (T, fos)=Rain Forest (Terrestrial, fossorial), or Aq (FW, rs)=Aquatic (Fresh Water, rapid streams), with any details added when available. At the same time, input to Habitat needs much improvement, not excluding the difficult but proper use of indispensable local informants and national naturalists—noticeably downgraded post-Simon and no longer included as full references.

Local Knowledge

The editors unwittingly raise the local-source point by saying that 'information is unusually scanty' for the clouded leopard (*Neofelis*). Any intelligent inland Bornean male (? 250,000 ♂) could resolve editorial doubt that this lovely cat is arboreal. Rarely does it come to earth, except to cub or (sometimes) kill. It is also wholly nocturnal—ignored, here and almost everywhere, yet behaviour is fundamental not only to conservation control but to the conduct of ecological studies so frequently advocated. In 20 years largely spent in clouded leopard country, often with Dayaks wearing leopard incisors through their ear-lobes, I never saw one alive, so high and sly they daily sleep deep in the green forest. The hill tribes had special, highly-prized dogs trained to bay the tree-base; most will not. This lethal impact is finished now, with a big consequent lift for *Neofelis*. The demand was entirely for local, ornamental, pagan use, as so often in Asia and Africa; you may search this book in vain for

any clue that similar native impacts exterminated (for instance) Borneo's tapir and tiger (both only now threatened elsewhere) back in the Stone Age. (Simon had a valuable section on Former Distribution, now discarded). Incidentally, a separate red sheet for a Formosan montane race, reports it as barely known. You may bet 100:1 there are at least 10,000 Formosans who *do* know, though whether it is indeed taxonomically valid as *N.n. brachyura* is another question—Simon, citing good authority, doubted it; the new version, without new authority, ignores the point and proposes the Formosan 'form' be studied in the field 'as a matter of urgency'.

To sum up so far: these first four sections (Status, Distribution, Population, Habitat) heavily overlap, partly through editorial work-pressures and loose terminological concepts. We have, in fairness, to judge scientific presentation as much by our clear textual definitions as by any ready systematic framework borrowed from Linnaeus. Moreover, it is difficult to conclude, on the sheeted evidence, that on these four matters there has been any general consistent improvement on the Simon original that would justify the cost of more than issuing addenda sheets with new information up-dating and adding to the old format.

Conservation Measures Taken, next, is a factual section, descriptive and no doubt complete. Irritatingly, repeated listing, at length, of US and a (very) few other legal controls, sometimes for each subspecies, could well be conveyed by a single set of dated asterisks, instead of spelling it out again and again—though the point is important.

Conservation Measures Proposed, a new category, is the exact opposite of its preceding section: widely speculative, yet (in this context) obviously stated as authoritative if not finally definitive. No qualifications or doubts are expressed. These paragraphs delineate, for taxon after taxon, what must appear to every outside reader to be agreed SSC policy for future treatment and priorities. There is much good sense and practical 'guidance' given, though without any sources, references or authorities. But there is an overwhelmingly consistent emphasis on the priority need for more scientific research. Not infrequently *no* other proposals are offered. The overall message is that, for a wide range of *RDB/SSC* activity, no other conservation effort need (nor indeed can) be taken first. This is one possible, possibly reasonable, argument. But where has it been argued? Who says it is so? It represents a revolutionary change in outlook from the Simon original and more recent SSC philosophies, inadequately thought out though these have been. A large and disinterested school of world conservationists believes the prior need, in many cases (especially threatened forms in remoter areas) is for urgent field action to reform local action and behaviour, right outside the range of scientific expertise in the first instance.

Let us look at the three-quarters of the 132 red sheets fully advocating research studies in the new *RDB*. These do not generally include taxa already much studied (orang-utan, and larger European and Russian beasts). The terminology used varies, as usual. There is

no systematic grading of research categories or procedural priorities. Taking words as nearly as possible at their page-face value we get, amidst much overlap, roughly this:

- 29 stress 'urgent surveys' (normally in the plural);
- 21 demand 'ecological' or 'etho-ecological' studies;
- 20 demand 'status surveys' (including 'extensive');
- 8 demand 'field studies' and other less precise terms;
- 6 are for vaguer 'promotion of research' and the like;
- 6 merit 'intensive programs', 'special expeditions' (see below), etc.

These programme terms are duplicated and multiplied in the far more numerous non-red sheets. One type of wording first recommends 'a survey in selected areas... to ascertain its distribution and status' directly 'as a basis for the establishment of reserves and other action' (solenodon; cf. marsupials wurrung, mer-rin; maned wolf, etc.). But, less modestly, we get '*complete* ecological studies' needed before all else (Cuvier's and Dominican hutias). From here it can be a short step to study as the *only* required step. A special line advises surveys to see if the animal still exists (e.g. Javan and Bali tigers) contrasting with other cases where—though such data seems equally relevant—no action is advised, as for pig-footed bandicoot ('possibly extinct... not seen by any modern biologist') or long-tailed dunnart (known only from four specimens). We are not told the principles by which some are worth less effort than others. Who decides? Has it ever been thought out at all? If so, where?—and when?

On the contrary, Wilson's palm squirrel of Zaïre, like many ground squirrels, is 'very rare; little known' and surveys are proposed 'to determine the reasons for its rarity' and even 'whether it is, in fact, threatened'. I am the latest principal authority cited on the related four-striped ground squirrel, confined to far inland Borneo, although I have in fact for years been urging it is out of place in the *RDB*. Apparently, like the Royal Family—once in you cannot be removed except for treason. (Simon finally had c.280 sheets, the new version has 320; cf. the original 14 on the 1949 Lake Success list). Instead this pretty little fellow is now felt to be in need of a study 'of life history and habitat requirements... to determine the factors limiting its numbers'. Schedule a team for three years, with desirable helicopter support, and God bless my soul if they find six *Lariscus hosei*, let alone one of the factors that have made it (and many other Borneans) specialised, remote, totally unthreatened, undisturbed today, as probably all through the Pleistocene. At least 50 unsheeted Borneo vertebrates are, in varying ways, in the same position. This position derives from obscure palaeo-ecological and climatic factors of great insular complexity, as yet insufficiently understood even in the narrow terms of geology or palynology, and presently remote from ad hoc exploration for one nocturnal, terrestrial, small rodent of minor taxonomic interest, taken in upland island eco-isolation.

That old Borneo pet (or four-striped hobby-horselet?) raises the haunting question: who decides *what* in the *RDB* nowadays? A recent test-case will indicate the scale of the problem. Dr Robert Bustard has just circulated, from Canberra, a list of 33 marsupials

declared as 'rare and likely to become extinct' in Australia. His list was warmly accepted by IUCN's Director General (31 July 1973). Yet 22 of these are *not* in the RDB, and only 11 occur in both lists.

Far from any squirrel, delightfully quotable are the RDB proposals for indubitably threatened Kloss's gibbon, confined to some islets off the Sumatran coast:

'The behaviour, ecological requirements and natural habitat of this species should be studied in detail, to clarify the role of this unique species in the evolution of the Hylobatidae, to determine the degree to which it can adapt to exploited forest . . .'

Difficult for anyone who has seen one to *imagine* a graceful gibbon swinging through secondary jungle. Is it even possible? But at least the Indo-Pacific islands do seem to bring out an imagination seldom obvious in Morges, with its gently inland-lacustrine naïvety—reflected again, for instance, in the Sumatra rabbit *Nesolagus netscheri*, another high montane, whose proposals begin: 'If any indigenous forest remains' . . . well then a survey should follow, inevitably. The spiny rat of the Ryukyus stimulates a need for 'scientific surveys' not of it but (unusually) 'to determine whether there are suitable natural areas remaining to preserve some of the native fauna and flora'. Good thinking. But here touched upon *passim* is a whole other, wider, non-specific approach?

The Expeditions

The cream of all these and many more advocated studies are the expeditions, large-scale operations. Thus another of those 'probably extinct' forms, whose remedial treatment we have already noted as ranging from the cavalier (a plain 'None') to the lavish, peaks with the Syrian wild ass, one of five races of *Equus hemionus*, while one merely white-sheet Madagascar lemur, *Hapalemur simus*, (of 19 Madagascans sheeted) 'justifies the mounting of a special expedition', because of 'the considerable scientific interest of this very rare species'. Taxonomic interest is especially emphasised; aesthetic interest barely hinted at. Along that same island coast, *Allocebus trichotis* rates 'a long-term scientific expedition' because 'it could well provide valuable information on the origins of Malagasy lemurs'; likewise the indri ('of exceptional scientific interest'). A different insight comes with the Indiana bat, for which a comprehensive life history and taxonomy has already been published (by J. S. Hall, 1962). This perhaps unconsciously irritates the editors into a terse single proposal: 'publish the life history and biology of *bats* and publicise the economic importance of their role'. Fine: but why only this one mention for a world problem vital in conservation's public relations, applicable throughout *RDBs*?

Similarly near-unique here (in the scale of recognitions), but far more important in principle, is an almost casual reference to the socio-economic factor behind ALL this under *walia* ibex, confined to the Semien Mountains of Ethiopia, where the new *RDB* suddenly advocates: 'technical assistance for people living in the vicinity, to encourage them to adopt modern farming techniques and abandon shifting agriculture'. This is, of course, another world-basic problem,

not just for this montane but for a great many other threatened and uncounted about-to-be-threatened taxa over vast tropical Africa, Asia and elsewhere. What is the point of a single casual reference like this? Does it not indicate intellectual confusion?

* * *

This slightly intricate analysis of the Proposals section has been pursued because it seems fundamental to an understanding of a major new trend in organised international conservation, of which the *RDB* is one honestly expressed expression.

I would be the last to begrudge the rich and growing pastures of immediate research in ethology, ecology (my own boyhood field of the early thirties.) *et al.* But on the scale here envisaged we have to think, maybe re-think, cost-effectiveness and 'other need' priorities. We have to ask if the hundreds of new jobs and funds needed for these programmes should be, let alone are, available; accentuated against a background where the World Wildlife Fund failed to reach even its modest 1973 appeal target.

It is unmistakably the case that under my able friend Dr Gerardo Budowski, IUCN has greatly improved its status in the realms of science and international administration (on the western level). Has this now gone far enough? But what of other, as (or more) important aspects,—including (not least) more individualist, insighted, intuitive and broader-minded subspecies of con-intelligence? We have to face a position where, while eco-ethological knowledge increases (and improves) rapidly, yet at the same time in large slices of this world, other and much larger ignorances are at work to destroy the biotope regardless. The global constituency for positive conservation may actually be shrinking faster. For example, Dr Lee Talbot made the first general reconnaissance of South-east Asia in the late fifties; a decade later he re-assessed the scene and concluded (at the Pacific Science Congress, Canberra) that there had really been little or *no* overall improvement in the interval, though he hopefully hypothesised better prospects ahead! I prefer the older wisdom of Smithsonian veteran Dr F. R. Fosberg, who recently reviewed—from his vast long experience—the whole tropical scene. After pointing out that nine-tenths of the world's plant and animal species occur in the tropics, he emphasised that a great many of these have never been discovered or described by scientists. How about *that* as an *RDB* Proposal Programme? He concludes with this ultra-sobering research thought: 'Unquestionably, many species existing in the 20th century either have been or will become extinct *before they are discovered* and studied by man.'^{*}

Clearly enough every known taxon (threatened or not) deserves further study. But during 30 years of field experience in the Far East and Pacific, I can think of no case where research, of itself, initially saved or helped to save anything, but of many cases where effective

* In Meggers, Betty (editor) *Tropical Forest Ecosystems* Washington (Smithsonian), 1973:350, an important compendium for conservationists, though concentrating on Amazonia and West Africa.

action had been taken on commonsense appreciation based on close local understanding of a total situation, implemented at once (on the spot) by effective, administrative, locally-based, socially integrated action. I can, alas, also think of several cases (unnamed here in kindness) where piles of research bumph has been mooted, circulated, and several costly projects undertaken with no *practical*, visible results, the species meanwhile continuing to decline (even in the survey areas).

A New Approach

Conservation stems from and exists as ideology and philosophy, aesthetics and morals. For these intellectual disciplines, highly variable from land to land or religion to ism, science comes primarily (if at all) as a means, not an end. These attitudes, for better or for worse, set up and have sustained IUCN, WWF and world-wide care generally, and SSC more particularly. They are deeply based on the compassion of pity, of an unscientific, emotive love. Desirable though it may be to 'advance' and to remain logically 'beyond' this phase, a big risk is incurred if the changes are oversimplified or hastened in the interests of tidiness or status respectability (necessary though this can be). Many unwestern people are still bewildered—or corruptly frightened—when area needs are presented as best answered by foreigners re-investigating problems well-recognised by themselves, even if unanalysed or deliberately falsified locally. In many plant and animal contexts, funding apart, outside sponsored research is too cumbersome and potentially counter-productive. It does not touch the factors which tomorrow decide survival in wilder lands. At the least, we need a fresh, simplified, combined study-action approach, common-sense factual search leading to on-the-spot organisation and implementation forthwith.

In any event, for roughly 90 per cent of the red-sheet taxa and 75 per cent of the rest (excluding the 'indeterminate' grey sheets) *there is already sufficient information for required, urgent, on-the-spot action*. Counter-threat dynamics can begin at once. Necessary research can follow later—if unavoidable, much later, when the position is secured. Where information at all levels remains genuinely inadequate for sound action, quite simple *ad hoc* investigation, preferably by *local* naturalists backed up by short-term politically sophisticated visiting support at the prestige level, will generally provide sufficient impetus, except in wide deserts or the fast-decreasing sectors of the very few remaining uninhabited jungles.

There remain two final *RDB* sections: Remarks and References. Remarks contains varied additional information, especially (and often exclusively) reference to the numbers engaged, taken from the Zoo Year Book, 1971—far and away the most cited source in the *RDB*. This information would be better presented coded in the blank top right-hand corner—e.g. Z17, 14(3)×4 meaning 17 males, 14 females, 3 unsexed in 4 collections, with asterisks to denote if bred in captivity. This space could equally be used to give other vital data—habitat type, diurnal rhythm, main food style (seldom

mentioned at present: use M, B, R, F, I, S(hells), G(rass), F(ruit), L(leaves), etc.) and especially region (e.g. SEA Is. for Southeast Asian islands). Some indication of breeding seasons (months recorded by numbers) and size (four simple asterisk grades) would help too. (Simon had a valuable Distinguishing Characteristics section, now discarded). Existence of any Stud Book and its centre should also be indicated (SB: Bronx Zoo).

Remarks also again puzzlingly include re-statements of research need, such as 'further investigations into the cougar's current range, and ecological requirements status (sic) are needed' or 'will have to be rediscovered before any action is possible' (Brazilian three-banded armadillo), although with the latter the dread death-sentence 'None' has *already* been proclaimed twice on the sheet, under *both* Measures Taken and Measures Proposed. The newly revised Indus dolphin sheet (6/73) describes the wretch's 'very low brain-body ratio' and therefore probates it (in Remarks) to 'serve as a basis for conducting neurological research'—by underwater surgery, perhaps? Remarkd for the Sumatran serow (only): 'a restored population would be of great value as food'. Sumatra *does* something to the Morges men, that's for sure . . .

References, dealt with by a separate list for each sheet (Simon had a useful summary of repeaters for the whole book), are clearly to the point. With the under-developed local informant network, however, reliance is necessarily often on general and sometimes old published sources. The hispid hare does not correlate references with text. The most important text is overlooked for the black-footed ferret and prairie dog (McNulty's *Must they die?* 1971; reviewed in *IUCN Bulletin* 1971:191).

Conclusion and Construction

It is easy to find many faults in an ambitious job of re-work, most decently motivated and with difficulty undertaken. The job is apparently getting too big to handle in this way. A fully satisfactory result needs both much wider field contacts and deeper policy coordinates, as well as stricter categorisation and vigorous, ruthless sub-editing. In discussing this with Director-General Budowski, he positively insisted that there is no wish whatever—never has been—to over-centralise and super-professionalise in Morges. But right now, as this new volume vividly shows, it is in immediate danger not only of happening but of going so far as to disorientate other essential, enduring drives for conservation, particularly where SSC is concerned. Meanwhile IUCN is lagging ever further behind world problems on this front.

Much that has here been said, constructively, in this RDB case-analysis is, in effect, comment not on Morges HQ thinking as such, but of all SSC activity and its unwittingly diminished sense of responsibility within the exploding framework of conservation as a whole. But Morges has surely held the pass too narrowly. The non-specialists who do (or should) provide both a working proletariat and the shock-troop élite of world conservation have in recent years grown over-impressed by the supposed importance (omnipotence?)

of scientists (especially ecologists) as 'experts'. When all is said and done these good men and true are no more than essential senior consultants in many complex human operations, they can only *help* to win (or lose) wars, elections, harvests or campaigns of any kind—and they as often lose as win. . . .

Only a new self-confidence in our own ideas on *all* sides will prove adequate to the world's present eco-dilemma. It is high time, right now, that each and every one of us become more involved, more assured, more active, not less. It is no longer enough for the 'amateurs', 'enthusiasts' and 'theorists' to be kept—or to keep themselves modestly—on the fringe, as junior consultants or kindly fund-raisers for the boffins. Our IUCN equivalent of the US Congress must reimpose its authority over its own White House. And we have an even greater obligation than any elected politicians in a democracy: *our* constituents, animal and plant, are speechless, voteless, usually helpless. They pay no taxes! If we, as concerned women and men, allow ourselves to be by-passed, flattered, overlooked or otherwise diverted from the primary role in survival service, we shall grossly fail. Fail not only in human decency and honour; but fail equally the whole universe of life and death. Such a grave failure of conscience (regardless of science) is not to be borne in 1974.

Peace Corps Workers for Wildlife

The Environmental Program started jointly by the Smithsonian Institution and the US Peace Corps in early 1971 now has several hundred graduate volunteers working on wildlife management and research programmes in over 40 countries. They are doing an immense amount of valuable work. The Smithsonian selects the graduates after the Peace Corps has received the request from a government; they are then supported by the Corps. Their wide-ranging jobs include studies of the introduced and endemic rats in the Galapagos (vital for some of the giant tortoises), the monkey-eating eagle in the Philippines, and wild sheep in Iran; directing a prawn culture station in Mauritius and training a Mauritian successor; teaching and researching at the West African training school for wildlife management at Garoua, in Cameroon; drawing up management plans for Honduras and Ghana, and for national parks in Colombia and Costa Rica, and initiating wildlife education programmes in Botswana, Malawi and Kenya.

Pribilof Enquiry

The harvesting of fur seals on St George, one of Alaska's Pribilof Islands in the Bering Sea, has been stopped so that US scientists can research there. They will be trying to find the cause of the recent downward trend in the number of male fur seals. The decision was agreed by the International North Pacific Fur Seal Commission which administers the international convention that controls Pribilof fur seal management: the USA and USSR manage the herds, and Canada and Japan each year receive 15 per cent of the seals harvested.

Vicuña Increase

FPS Vice-President Felipe Benavides of Peru reports 'with great satisfaction' that the number of vicuña in the Pampas Galeras reserve in the Andes has increased from about 1750 in 1967 to over 6300.