carefully selected and organized information than is available. And there seems no foreseeable limit to the extent of knowledge and comprehension that would be needed to make us able to approach an ideal in environmental quality for human beings.

Seek Long-term Objectives

My suggestion, therefore, is that while we may hopefully be approaching the required zero-growth situation, we will be promoting, as a replacement for the present growth and materialistic motivation of humanity, the ideal of attainment of higher and higher quality of the human environment, both natural and social. Hopefully, the total of intellectual effort that is now directed to extracting the most short-term material resources of our planet, can be redirected. The long-term amelioration of the environment of the inhabitants of this planet, both human and non-human, would provide, in all its complexity, a task that could, and indeed should, motivate humanity as money does at present. The daunting sociological and psychological problem is: how to instill this new motivation into the collective human mind and culture.*

F. RAYMOND FOSBERG, Botanist Emeritus Department of Botany Smithsonian Institution Washington, DC 20560, USA.

EDITORIAL COMMENT A Future for Amazonia

I t was Richard Spruce, that masterful and self-sacrificing English explorer of the Amazon and the Andes, who in the 1850s wrote to a friend in London about the marvels of the tropical forest of the Amazon Valley.

'There were enormous trees, crowned with magnificent foliage, decked with fantastic parasites and hung over with lianas which varied in thickness from slender threads to huge python-like masses, were now round, now flattened, now knotted, and now twisted ... Intermixed with the trees and often equal to them in altitude grew noble palms; while other and far lovelier species of the same family, their ringed stems sometimes scarcely exceeding a finger's thickness but bearing plume-like fronds and pendulous bunches of black or red berries ... along with shrubs and arbuscles of many types, a bushy undergrowth, not usually very dense or difficult to penetrate ... The largest river in the world runs through the largest forest ... a forest which is practically unlimited, near three millions of square miles clad with trees and little else but trees ... I have lately been calculating the number of species that yet remain to be discovered in the great Amazonian forests ... there should still remain some 50,000 or even 80,000 species undiscovered.'

Much of this description, true, might fit many a tropical jungle; but it seems to be most appropriate indeed for the green cover of the vast Amazon Valley. And it seems, further, to be especially apt for the northwestern part of that great basin — that part which drew Spruce's rapt attention for seven long years.

The jungle of the Amazon still lures the naturalist. It is still a vast treasury of untouched botanical and zoological — not to mention ethnological — wealth. Having spent 18 years (13 of which constituted permanent residence) in botanical exploration of the north-west Amazon region, I am convinced that here, of all places on Earth, is a field crying out for many a lifetime of study.

Literature-polluting Travellers

Unfortunately in some ways it is not only the naturalist who is called to the Amazon. An ever-increasing stream of unprepared 'travellers', in search only of 'adventure', are penetrating the wilds of those parts of the world. The true scientist is perhaps of all people the least exclusory, not ignoring or tending to exclude other interests. He or she, of all men or women, would rejoice in having travellers wander hither and thither to educate the less fortunate stay-at-homes into the wonders of far-off and often hidden places. In the past century, there were travellers who laboured with this high intent; but today, such an individual is indeed a rarity. This century seems to have been deluged with articles and books by 'explorers' who, braving the 'terrors' of the untamed jungles, and escaping a hideous and novel death every few days, write their episodes in flashingly sensational terms — so far from the truth that one is almost won over to the need for strict censorship.

^{*} Reminiscent of the last theme mentioned in our latest annual report as President of the Foundation for Environmental Conservation, published on pages 75–6 of this issue. — Ed.

The reason, however, is clear: in the past, men who travelled afar were usually gentlemen of culture—sometimes of very great and interdisciplinary culture. If they wrote a book on their travels, it was a work of love and dedication. They did not need to grind out a book for the sake of fame or royalties. Recent times, on the contrary, seem to have given birth to the professional wanderer whose sole purpose is to prepare a best-seller and reap a large royalty. Many writers believe, it would appear, that best-sellers are made by sensationalizing and stretching 'the truth' to weird and obnoxious extremes. This is often suggested by the very title itself. Even reviewers are sometimes taken in; for reviewers of such books too often are completely ignorant of the topic which is being reviewed, especially when concerned with far-off and strange places.

At Home in the Jungle

As a plant explorer who has worked very protractedly in the Amazonian rain-forest and loved every moment of it, I cannot offer any hair-raising escapades or encounters with ferocious beasts or savage natives. Life in the jungle — when once one is adjusted to it — runs along about as smoothly as it does at home, and oftentimes more so.

The jungle is, by and large, an exceptionally healthy and safe place in which to live and work, and I am fully persuaded that those who, to judge from their writings, meet with constant dangers from Man, beast, or the environment, contract weird and fearful diseases without end, and are frustrated or escape death at every turn, are so ill-prepared for travel alone outside of our cities that they should not be allowed to roam the world; for they are not presenting an undistorted picture of the jungles, and are dishonestly misinforming their readers who usually have no means of learning the truth for themselves.

The Actual Situation

Let us turn to the jungle — as represented by Amazonian rain-forests — and see what it is. Jungles almost invariably 'steam' in the travel books of today. I suppose that tends to give them an aura of unknown mistiness in the minds of the unsuspecting reader. Over the years, I have looked and looked in vain. I have never seen a 'steaming jungle' in the Amazon. Mist and fog and low clouds there are at times, yes; but New England's remaining forests have all of these, too. Nor is our Amazon forest 'mysterious' — except, I should say, in many of our modern travel books. It is not more mysterious than Evangeline's 'forest primaeval'. True, there are mysteries hidden in the jungle; but they are mysteries only because no scientist has as yet studied them objectively and described them in detail. Yet they are yielding yearly to scientific research.

All of our woods in North America are fraught with mysteries; yet what Author would call the Maine woods 'mysterious'? No, it is all part of a seeming plan — dastardly in the extreme — to cast an aura of awe and fearsomeness around one of the greatest and most glorious creations of all, the tropical rain-forest. Whether this be done by Authors out of ignorance of their subject, for monetary gain, or in order to build up in their readers' minds a feeling of respect for courage which would lead a man to abandon the comforts of home and wrestle with such overwhelmingly perilous conditions — whatever may be the motive, let us hope that it can be stopped, and that soon our children in their schools, as well as their parents in their evening's leisure hour of TV, may be given the true picture of the tropical jungle.

Truthful Objectivity Needed

This can be accomplished if, before buying any book on the 'mysteries of the jungle' or other bogusly sensational title, the reader will demand a critical answer to three simple questions: (1) Who is the Author, and what is his preparation as a genuine investigator? (2) How long did his experience in the forest last? (3) Why is he writing the book — for the love of writing and education or for monetary gain? Answers to these questions should automatically inform the would-be reader as to whether or not the time and money which he invests in that book is wasted.

This whole problem presents much of direct concern to the world-wide and worth-while efforts at conservation that are now fortunately budding on all sides. To get the true message of conservation across, it will be necessary to educate the knowledgeable public that this need will hardly be served by permitting publication to continue of the plethora of books by would-be 'explorers' that are currently flooding the market and the media. I cannot recommend any kind of censorship; but knowledgeable reviewers may, by not hesitating to speak out and write forthrightly and unhesitatingly about the truth and value (or, alternatively, lack of both) of the book they are reviewing as an educational tool, be a tremendous help to modern efforts to conserve tropical forests and other endangered areas from continued deprecative and, in many instances, damaging influence resulting in part from pure ignorance.

RICHARD E. SCHULTES, Emeritus Professor & Director Botanical Museum of Harvard University 26 Oxford Street, Cambridge Massachusetts 02138, USA.