ticular during the winter of 1981-2), the introduction of hunting in certain protected areas, and the setting-up of tourist facilities in areas of great ecological value.

The Convention on the Conservation of European Wildlife and Natural Habitats has been signed by 20 Council of Europe countries and the EEC, and entered into force on 1 June 1982. It aims at the protection of wildlife in Europe as a whole, and of threatened species in particular. It is clear that the Convention can be instrumental in protecting wildlife if its application is assured by an independent authority. This is the purpose of the new Committee.

> COUNCIL OF EUROPE B.P. 431 R6 F-67006 Strasbourg France.

Military Activities and the Human Environment

The Stockholm International Peace Research Institute (SIPRI) has entered into an agreement with the United Nations Environment Programme (UNEP), as of 1 February 1983, for SIPRI to implement a jointly-financed six-years' project on 'Military Activities and the Human Environment'. The purpose of this project is to study, in a comprehensive way, the global impact on the human environment of the world's military sector in war (conventional, chemical, nuclear, etc.) as well as in peace. It is to address both the direct disruption of ecosystems, whether incidental or intentional, and the utilization of natural resources (raw materials) for military purposes. Conversely, it is expected as well to consider the influence of the human environment and its natural resources on military activities and international security in general. This set of studies will therefore fulfil the requirements of Chapter 15 of the United Nations System-wide Medium-term Environmental Programme, entitled 'The Arms Race and the Environment' (cf. UNEP/GC.10/7; 25 March 1982).

SIPRI is an independent institute for research into problems of peace and conflict — especially those of disarmament and arms regulation. An underlying purpose of SIPRI is to prevent or mitigate the pernicious effects of military activities. It was established in 1966 by the Swedish parliament (and is financed by it) to commemorate Sweden's 150 years of unbroken peace. UNEP, which has its headquarters in Nairobi, was established in 1972 by the United Nations General Assembly upon the recommendation of the United Nations Conference on the Human Environment, which had been held earlier that year in Stockholm. UNEP is the primary environmental planning and coordinating agency within the United Nations system, and also serves as the focal point for global environmental concerns.*

The project is being carried out under the direction of Dr Arthur H. Westing, Senior Research Fellow at SIPRI and Adjunct Professor of Ecology at Hampshire College, Amherst, Massachusetts, USA, who has had training and experience both as an artillery officer and as a forest ecologist, and who has had a long-time interest in the ecological impact of warfare.** He is the Author of numerous articles on the subject†, and SIPRI has published three of his books in the field: Ecological Consequences of the Second Indochina War (1976), Weapons of Mass Destruction and the Environment (1977), and Warfare in a Fragile World: Military Impact on the Human Environment (1980). Dr Westing has offered relevant courses at Hampshire College, of which he was Dean of the School of Science, and during recent years has been a frequent consultant on the subject to UNEP.

SIPRI's research approach will be to identify the existing gaps in our knowledge of the interaction between military activities and the human environment. It will then either act to fill them with its own research staff or else commission the work to appropriate international and other research institutions or to qualified outside research workers. The primary product of these researches is to be a series of scholarly volumes published by SIPRI. A secondary product is to be a series of materials in a variety of written and audio-visual media for purposes of public information and education. These materials should provide an input to UNEP's contribution to the United Nations system-wide World Disarmament Campaign (cf. A/37/548; 3 Nov. 1982).

Among SIPRI's initial in-house studies are investigations into the impact on the human environment of the material remnants of war (such as the residue of hidden unexploded mines and other munitions), into the longterm effects on Man and Nature of the use of herbicides for hostile purposes, and into the environmental aftermath of the employment of lethal chemical weapons (the last by Mr Julian P. Perry Robinson). Other investigations and activities that are expected to be carried out in due course by SIPRI's own long-term research staff include studies of the military disruption of the upper atmosphere and of outer space (by Dr Bhupendra Jasani); of treaty and other legal considerations regarding the military impact on the human environment (by Mr Jozef Goldblat); and of approaches to public information and education (by Dr Malvern Lumsden). Other studies that are being contemplated include an analysis of the potential for manipulating the forces of Nature (meteorological, geological, and oceanographic) for hostile purposes, so-called geophysical warfare, and an examination of the question of whether there are ecologically important areas in the world where destruction would be particularly disruptive to the wider or even global environment that is, to The Biosphere in major part or whole.

SIPRI expects to prepare a basis for coordination of the projects related to military activities and the human environment by other intergovernmental and nongovernmental agencies such as the United Nations Department of Disarmament Affairs (New York), United Nations Institute for Disarmament Research (Geneva), United Nations Educational, Scientific, and Cultural Organization (Paris), United Nations University (Tokyo), United Nations University for Peace (San José), Interna-

^{*} See, for example, our extensive featuring of UNEP in our Spring issue of last year.—Ed.

^{**} In which connection we first ran across Dr Westing more than a decade ago, and published his 'Herbicides in War: Current Status and Future Doubt' in our old Journal (Biological Conservation, 4(5), pp. 322-7, figs, 1972.—Ed.

[†] Including several which we have been privileged to publish, such as his 'Environmental Impact of Nuclear War' (Environmental Conservation, 8(4), pp. 269-73, 1981), his Guest Editorial 'Environmental Consequences of Nuclear Warfare' (Ibid., 9(4), pp. 269-72, 1982), and the joint 'The Environmental Imperative of Nuclear Disarmament' heading up our present issue.—Ed.

tional Institute for Applied Systems Analysis (near Vienna), International Union for Conservation of Nature and Natural Resources (near Geneva), and Worldwatch Institute (Washington); and perhaps as well of the projects in this field by a number of national academies of science, both east and west. It also expects to undertake initiatives in suggesting new activities relevant to the subject, and meanwhile takes this opportunity to solicit suggestions on any aspect of the project.

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Thoughts on Implementation of the World Campaign for The Biosphere

Having read with much interest and appreciation the various papers, especially in the Summer 1982 issue of *Environmental Conservation*, which have described and declared the World Campaign for The Biosphere, I support the Campaign wholeheartedly, but nevertheless feel that its implementation could, and should, be more active than has yet emerged.*

For implementation I do not concern myself with the relative importance, within the Campaign, of education, research, practical action, and institutional change. I agree with Worthington's (1982) statement that education and practical action are mutually supportive, and fundamentally the most important objectives. In addition, research can usually be approved and carried on as needed, while institutional change is likely to follow widespread environmental education and practical action. By implementation I refer rather to the means by which the aforementioned objectives will be accomplished—that is, to planning and management.

Two Authors have addressed this topic. One advocates the preparation of a plan of action formulated by a:

"...small planning group [that] will need to get to work immediately. It would best be composed of a few leading organizations, with perhaps some outside individuals." (Worthington, 1982).

In contrast the other Author, while suggesting the involvement of various international organizations, states that:

'Although a micro-secretariat of not more than four well-chosen persons with reasonable wherewithal for communications etc. may prove desirable, it is not considered necessary to have any major budget to promote most aspects of the Campaign; indeed the absence of any major financing might well be an advantage *inter alia* in limiting the promoters to enthusiastic scholars and other dedicated workers lacking financial aspirations and concomitant self-promotional ambitions.' (Polunin, 1982).

It is my firm belief that neither of the above proposals is ideal in view of the Campaign's need to reach as many different people, in as many different places, as soon as possible, and indeed ultimately the whole world.

The main fault that I find with Worthington's scenario is its emphasis on organizational coordination of the Campaign. Inter-group rivalry between environmental and other organizations (both governmental and nongovernmental) is real. Assigning the planning and/or management of the Campaign to one or a few organizations (whether existing or especially created) could be a major tactical error; there are bound to be one or more organizations who would feel resentful of their 'lesser' role in the Campaign. Presumably the major reason for wanting organizations in control of the Campaign is to take advantage of their financial, human, and other resources. But by enlisting, and delegating to, various organizations, a Campaign secretariat could gain the resources of many organizations without chancing the political disadvantages of directly associating the Campaign with specific groups.

It is to the choice of a Campaign secretariat that Polunin addresses himself. The difficulty that I have with the statement quoted above is that it opens the World Campaign for The Biosphere to those two perennial charges against the environmental movement—that it is an elite movement (socially, economically, and scholastically), and that as a result it tends to 'preach to the converted'.

In theory it might seem a good idea to choose the Secretariat from knowledgeable, well-known, ostensibly ambitionless scholars. But in practice there are a number of difficulties with this. Firstly it is no more true to say that all scholars are ambitionless than it is to say that all the rest of society are power- and money-hungry social climbers. To be sure, there are scholars who are as Professor Polunin has described, but there are also a great many other people who fit his description of the desired secretariat member. While the financial and personal resources of a scholar would certainly be of use to the Secretariat, it seems foolish to undertake the World Campaign for The Biosphere without also undertaking to find some source of funding for the operation of a small central secretariat. The concept itself is on a grand scale, so why be petty in the organizing of the Campaign?**

There is another objection to a purely 'scholarly' secretariat, and that is the reputation which the scholar has gained, among many people of our world, for 'living in an ivory tower'. If the Campaign gains the reputation of being dependent on another group of scholars 'out to save the world', it would not only produce little that is really new but would also risk alienating a large portion of its potential audience. Without question the experience, contacts, and knowledge, of scholars could be invaluable to the Campaign; but in an advisory, recruited capacity.

To my mind the members of the secretariat, and there should be a small one as Professor Polunin has suggested, should not be scholars. They should be individuals with scholarly and practical experience of environmental conservation and of the environmental movement. They need not be particularly well-known, and certainly should not be controversial, figures. They should be able to converse with scholars, benefactors, businessmen and industry, and the average citizen, with some facility.

^{*} Actually, a new world body is currently being organized primarily to foster the Campaign and take it finally off our overburdened shoulders.—Ed.

^{**} It was not so much a matter of pettiness as of belief, from experience. That a dedicated small outfit can commonly do more than a large one consisting of numerous individuals employed in feeding one another and hence lacking concerted thrust.—Ed.