

Tropical rain forests

Ecologists unite for diversity

Washington

A group of senior academic ecologists calling itself "Club of Earth" plans this week to issue a declaration stating that the loss of biological diversity caused in large part by the rapid destruction of tropical rain forests could constitute a threat to human civilization "second only to thermonuclear war". The group, which includes Edward O. Wilson of Harvard University, G. Evelyn Hutchinson of Yale and Paul Ehrlich of Stanford, foresees within the next few decades the extinction of a quarter of all animal and plant species on Earth unless decision makers implement policies that combine economic interests with the preservation of diversity.

The group, which will probably be restricted to 10 members, intends to make its first declaration at the start of a three-day symposium on "bioDiversity" to be held this week by the National Academy of Sciences and the Smithsonian Institution in Washington D.C. Club of Earth will then make occasional informed statements on the state of biological diversity for the public and for political leaders. The group believes ecologists have failed to make an adequate impact on public policy and will urge that they be routinely consulted on planning decisions.

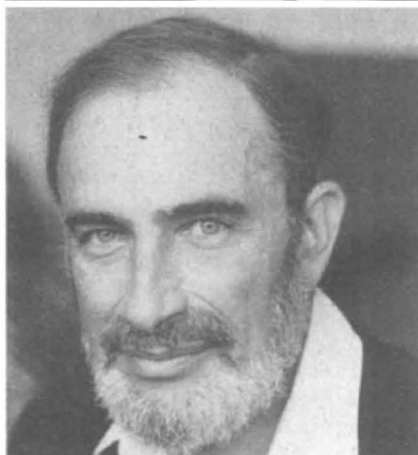
According to Wilson, membership of the new group has been restricted to distinguished scientists who are members of the National Academy of Sciences in order to ensure that it "cannot be ignored". Other members may include Jared Diamond, Peter Raven and Thomas Eisner. Wilson says the group's declarations, although political, will be "chaste and sparing".

Chaste and sparing would scarcely describe Paul Ehrlich's past diatribes against environmental mismanagement, but the data assembled by Wilson to illustrate the rate of loss of species are compelling. Wilson estimates there may be between 5 and 30 million species on earth, although only 1.7 million are described. Tropical rain forests contain over half of the total, but are being destroyed at the rate of 5.9 million hectares (more than the area of Costa Rica) per year, equivalent to 0.7 per cent of total cover. If this rate is maintained, all tropical rain forest will be clear-cut or seriously disturbed by A.D. 2135.

Wilson argues for a major effort by biologists to assess species diversity worldwide; he says the project is economically feasible and, unlike recent proposals to sequence the human genome (see *Nature* 322, 397), urgent because if it is not done now the species will have become extinct. He believes the case for slowing the rate of extinctions is not merely aesthetic; many medicines and foods may be developed

from novel species, and their germ plasm may yield valuable new hybrids.

Ehrlich says the Club of Earth has been formed in part because some biologists



Edward O. Wilson (top) and Paul Ehrlich (bottom) will help found Club of Earth.

were "very disturbed" by a National Research Council study of human population trends published early this year (Population growth and economic development; policy questions. National Research Council, 1986) which concluded that population growth in developing coun-

tries might in some circumstances not be a bad thing. Ehrlich says the study was "full of horrendous errors" that came about because it was conducted entirely by social scientists and economists and included no input from ecologists and evolutionists.

This week's symposium is plainly intended as a media event. It has been designed to explain biological diversity and its importance to the public and government, according to its organizers, and it results from growing concern about the issue at the Academy, where it is felt it has failed to receive the attention it deserves. Speakers representing all interests will be present, including the World Bank, currently under criticism for allegedly supporting environmentally unsound development projects, and from the US government's Agency for International Development (AID).

The maintenance of biological diversity has been slowly gaining prominence as a public issue in recent years. The National Wildlife Federation has published proposals to use natural resource conservation considerations, including biological diversity, as a *quid pro quo* for international debt "rollovers" and "forgiveness". Following Congressional directives made in 1983, AID now has a published strategy for encouraging the support of biological diversity and says it already encourages aid recipients to protect their biological resources, for example by developing conservation areas. Critics contend, however, that specific action so far has been slight.

Legislation now awaiting final Senate approval would oblige AID to spend \$10 million per year on new projects designed to encourage biological diversity in developing countries. Agreement between the House and Senate on the bill seems likely, probably with the \$10 million phased in over several years) but a presidential veto is possible; although AID says it is planning to take greater account of diversity considerations in its future projects, the administration is opposed in principle to the provision of earmarked funds.

Tim Beardsley

Japan finally says yes to Star Wars proposals

Tokyo

JAPAN has finally announced its intention to participate in the research programme of the US Strategic Defense Initiative (SDI). In making the announcement last week, Chief Secretary Masaharu Gotoda extolled the virtues of the programme, emphasizing its defensive nature and the potential benefits to Japan's high-technology industry. Opposition parties, however, roundly denounced the decision as running completely counter to a Diet resolution on the non-militarization of space and the war-renouncing provision of the constitution. But with the ruling party holding a stable majority, Japan's participation is assured.

Last week's decision followed 18 months of deliberations during which the Japanese government sent three missions to the US and held six cabinet level meetings to discuss the technological, strategic and legal implications of joining SDI. Technology will be transferred to the US under existing laws and Japan-US agreements, and the Ministry of International Trade and Industry will work out guidelines to ensure the "smooth" participation of Japan's industry — no Japanese company has ever concluded a consignment contract with the US Department of Defense, and there are some fears that SDI is an American plot to drain Japan of its latest high technology.

David Swinbanks