

developing nations who are all, to one degree or another, worried about more immediate problems — the economy, for instance.

Lack of commitment may account for the fact that the US government has just announced a plan to “encourage the preservation of the world’s disappearing ecosystems and development of new drugs from natural products”, while at the same time committing ridiculously little money to the effort. The new International Cooperative Biodiversity Groups Program, sponsored jointly by the US Agency for International Development, the National Science Foundation and the National Institutes of Health, offers the world a whopping \$1.5 million in grant funds “to support developing nations’ efforts to conserve native species” and enhance research capacity.

Wishful thinking

The biodiversity programme was created following a 1991 conference with the requisite diversity of participants — representatives of government and drug companies, lawyers and ethnobiologists. The presumption is that modest funding from this new US programme will enable researchers in developing countries to collect native species of plants and organisms, train young scientists and create biodiversity research centres. But \$1.5 million will not multiply like the loaves and fishes to feed the need for conservation of species. It is an important goal but one marked by wishful thinking.

The scientists and others at the three agencies who created the new biodiversity program no doubt are keenly disappointed with the funding that has been allocated to such an important project.

In this context it is worth renewed consideration of the role of private industry in species conservation. Merck & Co., one of the world’s largest pharmaceutical companies, has invested \$1 million in a research project in Costa Rica alone to identify new drugs from indigenous plants. Although the terms of that agreement are being questioned (see page 565), the private sector may be better placed to devise ways of protecting species while also using them to human advantage than are governments that fail to back their philosophical commitments with useful sums of money. □

in the United States, but nobody would be surprised if he had been. Meanwhile, even the formal celebration in the United States last Monday of the 500th anniversary of his landfall in the Caribbean was overshadowed by the increasingly torrid climate of the presidential election. Why should one who helped to change the world be dealt with so shabbily?

No doubt the respect that would ordinarily be due to a great navigator is compromised by the general knowledge of how Columbus became the one first to reach the New World from the Old in sufficiently good shape as to be able to return. But at a time when seamen around the Mediterranean had developed the techniques of sea navigation to enviable (and often feared) art, Italian Columbus took himself off to rich Spain in search of backers. Despite the passage of five centuries, the story smacks of how itinerant software makers now hawk the contents of their heads between one potential backer and another, settling eventually with the one who offers most. That sounds discreditable.

It also goes without saying that Columbus was lucky to be the first to get to the Americas and to return. Norse and Celtic legends of transatlantic voyages in earlier centuries are entirely believable, but are of no historical significance. They made nobody outstandingly richer than his fellows and, more seriously, they were unrecorded. Columbus, by contrast, entrusted his public relations to the court of Spain. That lesson has not been lost on his successors in the modern age. Do not imagine that when the US National Aeronautics and Space Administration sends its first man or woman to Mars, the rest of us will not be told.

What Columbus’s critics have been overtly complaining about these past few weeks, however, is that he was not required in advance to contemplate the consequences of his voyage; in blithe irresponsibility, he set out without the benefit of even an environmental impact statement, let alone the political, social and economic impact statements expected of one wishing to make such a momentous discovery. But that, of course, simply gives the game away. To Europeans in the fifteenth century, the discovery of the Americas was a true discovery because its scale overwhelmed their capacity to understand it. The cupidity of succeeding decades is a proof of that.

There remains a curious thought about the discovery of the Americas: the voyage was made possible by a primitive skill in the measurement of longitude, the practice of which cannot but have made Columbus and his contemporaries conscious of the Copernican question why the patterns of the supposedly fixed stars should vary with the seasons. Columbus, given his backers, would have known that discretion on the heliocentric issue would be prudent. It is nevertheless remarkable that the whole of modern science postdates his voyage. More than that, merely 15 or 20 generations have passed since then, which is perhaps the most vivid proof there could be of how his discovery accelerated the pace of change. In one sense, it was almost yesterday. □

Copernican Columbus?

Columbus, for all the criticism of the past few weeks, deserves his place in history.

POOR Christopher Columbus has had a bad press these past few weeks, being held responsible for all manner of dreadful happenings, from the sharp and cruel attenuation of the native populations of both Americas to the flourishing of the drug trade by symbiosis between rural industrialists in South America and the unhappy populations of cities in the North. So far as is known, Columbus has not been blamed for the parlous condition of public education