PUBLIC INSTITUTIONS

Fog over London

London

THE trustees of the Science Museum in London were convicted last week for "not maintaining cleaning and water treatment of their air-conditioning system in such a way that members of the public were not exposed to a risk to their health and safety", following the discovery of *Legionella* bacteria in the museum's air conditioning system. The trustees were fined £500 and ordered to pay £35,000 legal costs. The museum is considering an appeal.

This news could hardly have come at a worse time for London's research institutions and museums, currently facing financial problems.

London Zoo, showpiece of the Zoological Society of London, could close if last year's £5 million deficit is not reduced, warned Lord Peyton of Yeovil, the society's treasurer, on the release of its latest annual report. The zoo has been a drain on the society's funds for 25 years. Last year's deficit has been alleviated, to some extent, by £1·6 million of interest on a £10 million once-only government package to rescue the society in 1988, and £1·3 million of research funds from the Department of Education and Science.

At the Royal Botanic Gardens, Kew, shrinking public funds will mean that new conservation initiatives will have to rely on private money, according to Kew's director, Professor Ghillean Prance. Kew's annual core funding of about £12 million comes from the Ministry of Agriculture, but the annual increment of 2·5 per cent is a cut in real terms. A new visitor centre and a molecular systematics laboratory were both supplied from the public purse. Prance emphasizes Kew's "positive" approach to financial constraint: a development fund to underwrite new projects has been established, and a "Friends of Kew" scheme, launched last July, now has 1,000 members. Henry Gee

UK RESEARCH COUNCILS

New AFRC secretary

London

PROFESSOR Tom Blundell is to become secretary of the Agricultural and Food Research Council (AFRC) for five years from 1 January 1991. Blundell is a molecular biologist who heads the crystallography department at Birkbeck College London and is a member of the government's Advisory Council on Science and Technology. Throughout the 1980s, Blundell was closely involved with the UK research councils, holding posts within AFRC, the Science and Engineering Research Council and the Medical Research Council. He replaces Professor William Stewart, who became the government's chief scientific adviser on 1 October. Peter Aldhous

US/JAPAN COMPETITION

US "selling its children"?

Washington

CONGRESS and the US administration clashed once again last week over Japanese investment in US high technology, but while many of the issues are familiar, ominous signs of an economic downturn have raised both stakes and tempers in this ritual of Washington politics.

Last week's battle was over the sale of Semi-Gas Systems, an affiliate of Sematech, the industrial consortium that the US government helped to form in 1987 expressly to counter Japanese inroads in electronic high technology. Thanks to its association with Sematech, Semi-Gas has grown in value nearly five times and is a leader in the special high-purity gases used in the manufacture of semiconductors.

Nippon Sanso, a Japanese chemical company, found such performance hard to resist and made a bid for the company earlier this year that was approved by the White House, infuriating some in Congress (see *Nature* **346**, 500; 9 August 1990). "Allowing the sale of a company that was specifically nurtured to oppose foreign competition is absurd", claimed Senator Al Gore (Democrat, Tennessee) at a hearing last week. Gore likened such actions to "selling our children". Underlying the debate is a fundamental division in US politics over foreign investment in US industry. Many Republican policymakers, led by President Bush, believe that if a foreign, even Japanese, company pays a fair price for US technology, the US economy is no worse for it. "Are we better off seeing US companies going belly-up, or are we better off seeing them foreign-owned, but on our soil, subject to our laws?" asked Stephen Canner, director of the US Treasury's office of international investment.

On the other side are those critics, such as Gore, who argue that the "fair value" of a US company goes beyond the immediate worth of its technology to the less tangible place it holds in the US economy as a whole, by virtue of the jobs it provides, the taxes it pays, its relationship with other US companies, and the cost of replacing its services, if need be. US owners, when they sell their companies to Japanese investors, are undervaluing them by not taking into consideration their full benefits to society, Gore argues. Only the federal government can have the big-picture perspective to know what a high-technology company's real worth might be, and to block the sale if it is harmful to the US economy.

Of course, Gore's argument makes most sense if there is evidence that Japanese investors are buying US companies, stripping them of their technology and shutting them down, raising the prices of their products, or restricting sales so as not to compete with Japanese companies. Few studies have been undertaken on that subject, however. Largely anecdotal evidence compiled earlier this year by the Defense Science Board Task Force on Foreign Ownership and Control of US Industry suggests that in some cases Japanese purchase of US high-technology companies have resulted in shut-downs or created virtual Japanese monopolies that threaten US access to the technology.

On the other hand, a 1988 Department of Commerce report found that when foreign companies buy US businesses, it is largely to take advantage of the US workforce and markets, rather than to spite them. And as employers, foreign companies are often better than the US businesses they replace, the study found. The average US employee of a foreign-owned company made nearly $39,000 per year in 1986, compared to about $29,000 for the average employee of a US-owned company. "I think the majority of foreign companies are trying to take advantage of US business opportunities, rather than to rape the US firms and take their technology home", says Robert Lawrence, an analyst for the Washington-based Brookings Institution think-tank.

US officials argue that existing laws (the 1988 Exxon-Florio amendment in particular) allow them to halt sales only when they endanger "national security", a term they have defined as specifically relating to defence applications, not general economic well-being. "It's clear that the Exxon-Florio provision was not intended as a tool of industrial policy", said John Niehuss, senior deputy assistant secretary of the Treasury. Even if it were, he said, such interference would be unwarranted.

With no strong reason to believe that Japanese investment is undermining the US economy, Lawrence believes the only legitimate concern is the fear of foreign-controlled monopolies. Gore, at his hearing, pointed to two such cases now before US officials. One, the Connecticut-based Barden Corporation, which is the target of a takeover bid by a German industrial conglomerate, is the only source of high-precision ball-bearing that are required to keep US nuclear submarines quiet. The other, the Moore Machine Tool Company, which makes parts for nuclear weapons, is considering a bid by Fanuc, Inc., a Japanese company.

Warning the US officials that he would be watching their decision on these proposed sales, Gore offered his own guess at the reasons behind the US leniency on foreign takeovers. "I'm wondering if the United States has borrowed so much money from the Japanese, that we've become afraid to say 'no'".

Christopher Anderson