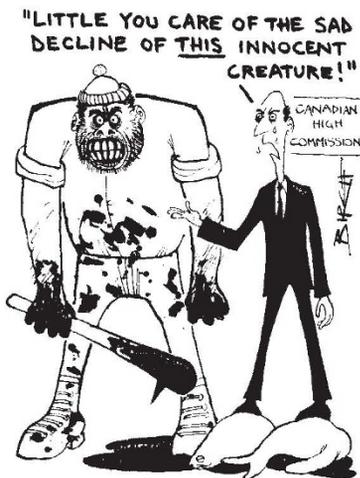


Canada's seals

Who's cooking what books?

The toughly worded resolution approved by the EEC's environment ministers last week to introduce a ban on the import of seal pup skins by its member states comes amid growing concern that the government of Canada (the country most affected by the ban) is making improper use of scientific data to support its opposition.

The relevant scientific questions concern trends and sizes of stocks of harp seals and hooded seals. A recent statement by the Canadian Fisheries and Oceans Minister Pierre de Bané that an October report by an *ad hoc* working group of the International Council for the Exploration of the Sea (ICES) took a "neutral position regarding



the hooded seal herd" is described in an EEC memorandum as "utterly wrong and totally without foundation", and catch figures quoted by Mr de Bané are described as "wrong". As to the harp seal, the ICES conclusion — cited in a Canadian government advertisement — that stocks in the north-west Atlantic probably increased between the late 1960s and the late 1970s has since been put down to statistical artefact by several experts.

An attempt three weeks ago by the EEC Environment Council to reach a decision on the proposed ban foundered amid confusion over what legal instrument should be used and what paragraph in the Treaty of Rome should form a basis for the decision. Enthusiasm for the ban ranged from lukewarm (United Kingdom) to fervent (the Netherlands and Italy). The resolution finally approved, unlike a regulation or a directive, is flexible and is not legally enforceable.

Since the abortive meeting of three weeks ago, the Canadian government has placed advertisements in daily newspapers in several European countries claiming that the ICES report, which has been commissioned by Canada and the EEC, "unanimously reported that the harp seal stock of the North West Atlantic has grown significantly during the past decade."

According to one scientist whose work formed an integral part of the ICES review, this conclusion "simply isn't there".

The ICES report estimated stocks of harp seals in the late 1960s at 1.2–1.6 million, while in the late 1970s the estimate is 1.5–2.0 million; it says, however, that the possibility that the herd had in fact decreased over this period was "not negligible". It is now thought that the suggestion of an increase is due entirely to a statistical artefact resulting from an attempt to compare estimates based on different methods.

On the question of the much less numerous hooded seal, the advertisements say "there is no indication that this species is in any way endangered". This contrasts sharply with an earlier study commissioned by the EEC from the British Nature Conservancy Council (NCC), which concluded that there was a risk that both species would be endangered by a continuation of the present rates of exploitation, with the hooded seal being most at peril. The ICES report in fact concluded simply that insufficient data are available to provide estimates of hooded seal stocks. Dr Sidney Holt, vice-chairman of the International Union for the Conservation of Nature and Natural Resources, himself a marine mammal specialist, has described the Canadian claims as "gross distortions" of the study's conclusions.

Mr Brian Casey, First Secretary at the Canadian High Commission in London, said of the NCC study that the conclusions were swayed by bias and that anyway it was invalidated by the ICES study. A Canadian government document also describes the NCC study group as "completely dominated by dedicated opponents of the seal hunt" and says NCC is "flagrantly selective" in its use of data. But the two scientists who drafted the NCC report also sat on the ICES working party.

The questions considered by the NCC and ICES reports were substantially different, and there are in fact few actual points of disagreement. The NCC report considered long-term changes in the total stocks of both species, whereas the ICES report was confined to short-term trends in stocks in the north-west Atlantic. The ICES report actually supports NCC's finding that there is a severe shortage of data on hooded seal stocks, which makes reliable estimates of population sizes impossible. It now appears that it ought also to agree with the NCC's conclusion that it is uncertain whether harp seal stocks are increasing or declining. But all this uncertainty may soon be cleared up. The Canadian government is advocating an International Convention on North Atlantic Sealing to provide for expert study and management of all aspects of the seal hunt.

Tim Beardsley & Jasper Becker

Migrant academics

Mobile Harvard

Washington

Last week, Harvard physicist Sheldon ("Shelly") Glashow, who shared the 1979 Nobel prize, denied widespread rumours that he had been offered a job at Texas A & M university at College Station at an annual salary of \$250,000. But Glashow did say he was considering moving there, had visited the university and looked at property. His wife has also visited. Clinton A. Phillips, dean of the faculty at Texas A & M, confirmed that "we are in a negotiation phase" with Glashow, who may spend a year "to see how he likes it".

Glashow would be a catch for the university, which sits on the prairie more than 100 miles from Austin and 90 miles from Houston. Twenty years ago, it had 10,000 students and not a strong reputation. But the state had set aside land in West Texas to help provide for the school, and, like other land in Texas, it had oil under it. So in the 1970s, while the endowments of other, better-known universities shrank, this permanent fund that serves Texas A & M and also the University of Texas at Austin, climbed to \$1,700 million — comparable with Harvard's endowment.

Texas A & M has recently lured a new dean to the college of science, John Fackler, a chemist from Case Western Reserve, and provided him with funds for laboratory facilities and staff to continue his research there. Arthur Hansen, formerly president of Purdue University, started as chancellor of Texas A & M last July and was provided with a new home which, Phillips said, cost almost \$1 million.

Phillips believes history as well as money is on his side. "In the beginning in this country there was the Ivy League. Then other universities came to be stars: the University of Chicago, Berkeley and Stanford grew in stature. Now our time has come".

Two things have clouded what otherwise seems to be a case of honest academic piracy. The first was that the university's interest in Glashow became known after it hired a new football coach for a comparable figure including television rights and other benefits. The president and chancellor received rises soon after, just to keep their dignity, so to speak. Nonetheless, the new coach had a bad season.

Texas A & M's arch-rival in football is the University of Texas at Austin, which is entitled to two-thirds of the benefits of the permanent fund. In talking to Glashow, Texas A & M may be trying to rival Austin in physics, too. In January 1982, Steven Weinberg, also a well-known Harvard physicist with a Nobel prize, decided to move to the Austin physics department, re-joining his wife, a professor of law, who in 1980 had joined the faculty of the Law School of the University of Texas at Austin. Weinberg's salary is rumoured to

be \$110,000, but he will not confirm this, saying only that his salary is not all that much higher than it was at Harvard.

The university is also giving him an appointment in astronomy and the chance to hire additional faculty to build up the

French nuclear power

Cap de la Hague heads on

The French government has finally approved a major extension of the nuclear fuel reprocessing plant at Cap de la Hague, near Cherbourg on the English Channel coast. Meanwhile, a major and partly critical report on La Hague and on reprocessing in general remains unpublished.

The extension will cost some FF20,000 million (£1,786 million) and covers the upgrading of the existing UP2 400 plant to handle 800 tonnes of spent pressurized water reactor fuel and the construction of a completely new plant (UP3) to handle the same amount. The plants would handle French spent fuel and that arising from plants in Japan, West Germany and Belgium with which the French fuel company Cogema already has contracts. Without the extension, the French nuclear power programme would have been compromised. But UP2 400 has been notoriously ineffective — reprocessing only 250 tonnes in its first five years compared with its projected 2,000. After a series of accidents, one of them potentially disastrous (see *Nature* 290, 538; 1981), the present government set up a scientific commission to investigate the plant.

The report is now complete and should be published in mid-February — but the government has announced that the expansion of La Hague should go ahead

physics department, which he considers excellent in some areas. "It's a very exciting prospect of being able to build a good group", he says. "I don't believe scientists go anywhere for money."

Deborah Shapley

before the report is out.

The commission's conclusions, although not public, are believed to be broadly in line with remarks communicated by Professor Castaing, its chairman, to science minister Jean-Pierre Chevènement in April. These were that while Cogema and the Commissariat à l'Énergie Atomique now "have the know-how" to build the extension, the technology is only sufficient "for the short and medium term". Castaing told Chevènement that the most satisfactory solution would be "better waste treatment", in particular the isolation of neptunium and americium from the high-level waste stream. The chairman also argued that long-term storage of unprocessed spent fuel, either wet or dry, was feasible, safe and economical, and must be studied because part of the spent fuel to which France is now committed might remain unprocessed (if there were problems with the new plant for example). The commission also advocated work on final disposal for glassified waste forms and spent fuel itself. And he added that a fast breeder programme "implies substantial progress in reprocessing". These remarks may have stimulated the government to a preemptive announcement of the La Hague extension.

Robert Walgate

Soviet science policy

Spread the net

Softly, softly, decentralization and increased local responsibility are emerging as major themes in President Yuri Andropov's economic policy for the Soviet Union. The annual meeting of the Academy of Sciences of the USSR earlier this month suggested that that decentralization should also apply to science. Matching words to good intentions, coverage of the session in the official party newspaper *Pravda* concentrated not on the speech of the academy president, Academician Anatolii P. Aleksandrov, but on that of one of the vice-presidents, Vladimir A. Kotel'nikov, which emphasized the role of the "Republic" academies and the local filials of the All-Union academy.

The occasion coincided with the celebration last week of the 60th anniversary of the founding of the Soviet

INSERM's new shape

French medical researchers are to be subjected to a new form of scientific assessment next year — a mixture of stricter and looser rules than those they face at present.

The new arrangements are part of the long-awaited reform of the Institut National de la Santé et de la Recherche Médicale (INSERM), a reform delayed by arguments over whether directors of research groups should have terms limited to 12 years. That question having been settled — the limit will apply, but not immediately — the way was open for official approval of the full reform. That approval has now been granted, and the details of the reform were published last week.

Among the terms are the new forms of scientific assessment, dear to the heart of INSERM's innovative director-general, M. Philippe Lazar. Lazar has sought a system which would allow non-conformist — and perhaps superficially mediocre — groups to make their mark. He believes talent, particularly in the undervalued sciences, must be given its opportunity, but that judgements, when made, must be strict and scientific.

The reform meets these two objectives. Groups will be judged infrequently (probably less than annually) but firmly by specialist scientific commissions — which must visit the laboratory concerned. The result will be the definition of a research programme, against which the group will be assessed next time round, with a guaranteed long-term budget.

The mechanism will give groups more freedom and more time from pointless form-filling and fund-hunting, Lazar believes.

Robert Walgate

Martlesham in business

An important new semiconductor manufacturing process that was originally developed at British Telecom research laboratories is now being exploited commercially by British Telecom's offshoot, Martlesham Enterprises Ltd, together with Thomas Swan and Co. Ltd.

In January this year British Telecom set up in partnership with other investors to exploit a new process developed by Dr M.M. Faktor and Dr R.H. Moss at British Telecom's laboratories at Martlesham Heath. The process uses a new series of compounds developed in association with Professor D.C. Bradley at Queen Mary College, London, in a technique known as metallo-organic chemical vapour deposition (MOCVD). Existing techniques for MOCVD which used highly toxic and explosive trialkyl gallium and indium compounds had proved extremely hazardous, and had

caused several fires and explosions.

The new chemicals will avoid the use of these dangerous compounds and will also increase the range of applications of the method. In particular the process can now be carried out much more effectively with indium phosphide, a material which is likely to find increasing applications in semiconductor devices which emit and transmit infrared light; connected to optical fibres such devices will be important in long-distance optic information links.

Martlesham Enterprises, after a long search, has now awarded manufacturing and selling rights for the new process to Thomas Swan, a specialist chemical manufacturer, which has already secured advance orders for the new chemicals and process equipment from the Massachusetts Institute of Technology.

Tim Beardsley