

NEWS AND VIEWS

Trouble at Euratom

THE Euratom organization seems to be deeply involved in a dispute of a kind now familiar at Brussels, which is also the headquarters of the European Economic Community. At the beginning of November the Commission of Euratom set a ten-day deadline for the resolution of a dispute between France and the other five members of the organization over the delivery of 180 kg of plutonium from the Euratom plant at Karlsruhe to the fast reactor experiment at Cadarache which is being operated jointly by France and Euratom. But time has run out without a settlement.

The immediate cause of the dispute is financial. The five-year programme to develop a fast reactor system on which France and Euratom embarked in 1963 was costed on the assumption that the plutonium for the project would be rented from the United States at a total cost of \$3.2 million, with France paying \$1.2 million. In the event, the United States AEC decided that it would prefer to sell this plutonium outright, and at a total cost of \$8 million. French delegates to Euratom have been taking the line that outright purchase ought to be financed by Euratom itself, on the grounds that the plutonium will remain a permanent capital asset in Europe long after the fast reactor experiment is over. Other members reply that France has called the tune and should therefore pay the piper. The French argument has been undermined by the German decision to pay the full cost of purchasing reactor fuel when the United States AEC asked for an outright sale instead of a rental agreement.

Underneath this dispute over the plutonium lies the mounting discontent of the French Government with the conduct of Euratom's operations. For one thing, the French argue that the cost of the research and development which is sponsored, or at least co-ordinated, by Euratom is needlessly great, particularly for those member countries which support substantial research programmes of their own. Then there is a feeling that the projects which interest Euratom are not those primarily of interest to countries such as France and Germany in which substantial nuclear industries already exist. Most probably, however, at least a part of the French discontent springs from some of the supra-national features of the Euratom organization. That is a bitter pill to swallow.

New Animals to Eat

UNDER the unpromising title "Comparative Nutrition of Wild Animals", a symposium at the London Zoo on November 10 and 11 was devoted to the details of the relative success with which various large herbivores convert a range of forage into a high protein product (meat). Underlying this theme was the assessment of the merits of various meat animals as supplementary or alternative sources of food for human beings. The conference organizer, Dr. M. A. Crawford of the Nuffield Institute of Comparative Medicine, set the scene by quoting from the report of the Director-General of the FAO for 1966.

The conversion characteristics of wild animals kept in captivity on a balanced diet, of semi-domesticated

animals that are protected and systematically cropped, and of wild animals that are merely harried by man were discussed. All the evidence points to the same conclusion: despite a huge range of starting materials and the variety of routes through which these are utilized, there is little difference in the protein quality of the meat from wild and domestic species. A biochemical comparison between the Cape buffalo and domestic ox, the wart-hot and farmyard pig, has shown a slight protein advantage in the wild species and a much lower volume of excess fat. The wart-hog may be thought to score over the domestic pig since its flesh combines the flavours of roast pork and turkey, and because it is resistant to swine fever.

Current world specialization in sheep and cattle meat production and in land use for grazing emerged as both short sighted and wasteful. The loss of ground cover and subsequent erosion in Africa due to the preferential introduction of grazing herds to areas well adapted to support browsing animals was illustrated. The use reindeer can make of marginal arctic lands and that the Lapps can make of reindeer was emphasized by Dr. Eliel Steen of Uppsala.

According to Dr. Kate Bertram of the Cambridge Zoological Laboratory, the more exotic ecological niche occupied by the dugong and manatees would take decades to bring into productive balance because of the depletions already made by human beings. They are still liable to be treated as a sport animal. The Sirenia convert otherwise unwelcome marine, estuarine and riverine underwater plants into high quality "steak".

Soviet zoologists have had the longest experience anywhere of the deliberate introduction of wild species for domestic production. Unfortunately no Soviet speaker was present, but a striking paper by V. D. Treus and D. Kravchenko (Askaniya-Nova Zoo Park) described the herd of African eland now farmed for their milk as well as their meat on the Ukraine steppe. 408 eland have been reared from four pairs brought from Africa in 1892. Twenty-one have been trained for milking, and the Russians claim that the milk has exceptional qualities and that it is especially long keeping. Dr. J. Morton Boyd of the Nature Conservancy described the experimental production of red deer on the Scottish island of Rum which, together with some other areas in Scotland, is being diversified from a sheep mono-culture.

Computers on the March

RAPID advances in the use of computers throughout British industry were promised by their most tireless advocate, Professor Gordon Black, when he announced plans for the membership of the National Computing Centre, of which he is the Director. Thirty thousand invitations to membership have been produced, labelled and posted—all by computer—to industrial firms likely to be interested. At least five thousand are expected to reply and Professor Black hopes that five hundred will send their first year's subscription.

The market for computers in Britain is expanding more rapidly than any other in the world, and commercial companies are beginning to profit. International Computers and Tabulators, Ltd., has orders for 680 computers, a figure hardly credible a few years ago. The Computing Centre itself has ordered two machines, an English Electric *KDF 9* and an ICT 1904, which will be