

DS Cameron, Brussels

FYI - EVJch
Stam

June 30th, 1970

GD Ingenthron, Brussels
HA Vodden, Ruabon

PCB's

DSC/l's

WB Papageorge, St. Louis

Attached is a clipping taken from a recent issue of the Times. I have not yet seen a copy of the first issue of the new journal "Environmental Pollution", but when I do so, I shall send you one.

You will remember that when we visited the Monks Wood people in May they told us they would be using this journal for the publication of the results of their study on PCB residues in various British birds.

DS Cameron

Encl. (1)

MONS 099502

Diana Pagano controls the production at a frigorifico—the name is derived from the first refrigeration ship which sailed from Argentina to France in 1862 and was called Frigorifique—owned by her father. In frigorificos, meat is graded, tested for disease, cut, packed and made ready for export. Diana is involved in every stage of this process. "It is exciting work and I don't know any other girl doing it. I have a boyfriend who is the owner of a frigorifico and we can talk about things like carcases and offal, whereas a girl would just say: 'How interesting,' and think I was a little strange."

"They imagine that this is a dirty industry, and this place would be covered with bones, blood and fat. They don't realize how hygienic and modern it is, and how we are subject to the most stringent rules regarding cleanliness."

The plant has a capacity to prepare cuts of meat from about 800 carcases a day, using 70 workers in the mornings and 90 in the evenings. The slaughtering is done near by, and carcases brought in a spotlessly clean lorry to the plant, cut into quar-

range, bookings on the ships, and discuss any problems people might have with lighting, temperature, or even damaged storage carcases. She is used to seeing animals being slaughtered, and it no longer upsets her as it did at first.

She first became interested in the work while a secretary at another large packing plant. So she decided to train for the production side of the industry, and for three years learnt how to recognize and prepare cuts of meat. "Now I am glad that I'm involved in managing part of the country's principal industry."

Argentina has a cattle population of 31 million, producing 2½ million tons of beef a year. Of this, 80 per cent is for home consumption—the people eat an average of just about half a pound of beef a day each—and the remaining 20 per cent is exported. Of this, five per cent comes to Britain.

The cattle are reared and fattened on the country's 400,000 estancias, enormous ranches on the vast plains of the Pampas area, which covers almost a quarter of a million square miles

dedicated living on the estancia to living in Buenos Aires and went there as much as possible, was obviously impressed with the social life of the capital. She mentioned the exclusive Jockey Club, founded 75 years ago. Membership is £60 a year, and this includes the wife and children under 12. Many of the British community there are among the 5,000 members, and one of their swimming pools is for the exclusive use of racehorses.

The other woman regarded her estancia as rather like a hippie commune, with everybody joining in the work. She drove alone in a large lorry—it was 24 hours away by road but her husband owned an aeroplane—and had designed all the surrounding garden. She bred horses, knew all the workers' names and was fascinated by all their superstitions. One man driving past one day was amazed to see her in full gaucho costume riding round the estancia, and once an old man of 99 came and asked for work. "We gave him accommodation and he now looks after the tyres—and we look after him."

"I'll try to meet women who feel the same way as I do so that we can investigate the problems of women," says. "I don't think that problem there are any different from those anywhere else in the world—the main one, I feel, is facing the opposition of men when women start to establish themselves as women in their own right."

She feels women get a raw deal in society, but that they will have to be pushed into taking some action.

"We do not have enough nursery schools, women never have economic independence, and girls are pressurized into marrying early. Many are made to feel unhappy if they are not married by 25. These are the sort of things I hope to be able to investigate."

Her husband, a researcher, agrees, and has often defended the cause of women.

However, Argentine women have solved one problem—the "pill" is available at any chemist without a doctor's prescription. As Mrs. Sampson said: "You can send your children out to buy it for you."

Science Report

POLLUTION

Chemical absorbed by birds

By Nature Times News Service

Birds in most regions and habitats of Britain carry small amounts of the industrial chemical known as P.C.B.s in their body tissues, according to an extensive survey carried out at the Monks Wood experimental station. But the chemical has probably accounted for fairly few deaths in the wild, although it may impede breeding success.

This is fortunate, because P.C.B.s (the term stands for polychlorinated biphenyls) are used in numerous industrial applications and would probably be far more costly to restrict than most pesticides. They find their way into the environment through the smoke and effluent from factories and the exhaust from aircraft engines.

The first sign of P.C.B.s in wild life was found in the early 1960s when chromatogram "peaks" of an unknown chemical were noticed in bird tissues being analyzed for D.D.T. Four years ago the peak was identified as being due to P.C.B.s. Since then the eggs and tissues of birds in many parts of Britain have been collected for measurement of their P.C.B.s content.

Ian Presti, D. J. Jefferys and N. W. Moore, scientists at the Monks Wood experimental station, have completed an analysis of more than 500 livers and eggs collected between 1966 and 1968. The results, reported in the first issue

of a journal called Environmental Pollution, indicate that birds from a wide range of habitats throughout Britain contain small quantities of P.C.B.s in their tissues. Worst affected are lake and river birds from the Midlands, east and south of England, some of which contained up to 900 parts per million in their livers.

The ubiquity of the chemical suggests that, like the organo-chlorine pesticides, they are resistant to natural means of degradation. Another similarity is that they accumulate in the body fat, so predatory birds at the top of food chains are the most at risk. In general, the quantities of P.C.B.s are of the same order of magnitude as the residues of D.D.T. in bird tissue.

Could the P.C.B.s have caused the damage to wild life, particularly birds of prey, that has been attributed to the organo-chlorine pesticides? The Monks Wood scientists rule this out because feeding experiments have shown that P.C.B.s are

less than a tenth as toxic to birds as D.D.T., which in turn is about a tenth as toxic as dieldrin.

Also, the population decline of birds such as the peregrine falcon and the sparrow hawk coincided in space and time with the introduction of aldrin, dieldrin and heptachlor. In the mid-1950s, whereas P.C.B.s probably entered the environment in the 1940s.

Although the P.C.B.s may not have caused any sudden population crash, it is hard to rule out more insidious, sub-lethal effects. In fact, there is some evidence to suggest that P.C.B.s may be partly responsible for the widespread breeding failure among birds of prey that has occurred since the last war in Europe and the United States.

Source: Environmental Pollution Vol. 1, P. 3, 1970, Elsevier Publishing Co.

© Nature Times News Service, 1970.

The Times 27th June 1970