And the lunacy of cutting defense spending by \$20 billion or more in a recession is admitted by more honest economists in London and elsewhere.

"Right now, in corporate boardrooms across the world, the decisions are being made to cut back, to disinvest. This will take two to three months for its effects to work through the economy. Then we will see the onset of a real economic downturn," emphasized a leading European economist. The estimate is that the collapse in output will hit the vulnerable consumer sector fastest. New car purchases and new home loans will simply be deferred as the impact of the \$1 trillion wipeout of small savings, involving millions of investors, is realized. This is most dangerous in the the United States, where consumer-credit buying soared to all-time highs in the last five years.

The second wave, aggravated by the collapse of the dollar, these sources stress, will impact on world trade flows. Imports of Japanese and German autos to the U.S. market will drop sharply as rising yen and deutschemark rates and collapsing U.S. consumer credit reinforce one another. "Developing countries will be worst hit in this depression," a London banker stressed.

Privately, representatives of some of Britain's oldest banking families are "extremely worried" over the policy chaos in Washington. As one such representative, a banker and Tory Member of Parliament, expressed the mood, "Everyone I know in the City just lost not only his shirt but his trousers as well. The [financial] cities of the world are bankrupt of ideas." Reliable reports are that certain of the world's better known financial firms would be bankrupt but for central bank bailout.

Shearson-London, Morgan Grenfell, Kleinwort Benson, and De Zoete Barclays are rumored to be the worst hit by the "Black Monday" collapse. "And Warburg, touted to be the most successful brokerage in the City, lost a cool \$100 million on the first day alone," one City source said.

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Interview: Dr. William Hazeltine

The battle to defeat carrying encephalitis

Encephalitis virus was found in mosquitoes in northern California during the summer, primarily carried in the native species Culex tarsalis. Here Dr. William Hazeltine, an entomologist and the Manager/Environmentalist of the Butte County Mosquito Abatement District in California, discusses how the virus was detected, the course of the disease, and some of the political problems that constrained the eradication program. Hazeltine was interviewed on Aug. 25, 1987 by Marjorie Mazel Hecht. He reported in October that the risk of encephalitis had ended for this season.

EIR: I understand that you have found mosquitoes carrying the encephalitis virus.

Hazeltine: Yes, Western equine encephalitis. Actually, the real long-handled name is Western equine encephalomyelitis, or WEE.

EIR: What does this mean for the people in your area? **Hazeltine:** The transmission to people is by mosquito bite, so mosquitoes containing the WEE virus are infective, and it signals that we could have transmission to either people or horses—and it signals a problem.

EIR: How did you detect this virus? Do you have a regular testing program that captures mosquitoes?

Hazeltine: Part of the district program is to use a carbon dioxide light trap, which collects the mosquitoes alive. We chill them, separate by species, put a given number of each species in a jar, freeze them, and send them to the laboratory. They then grind them up and inject them into a cephaline mouse brain, and look for the development of symptoms in the mouse.

We also have chicken flocks and we look at the antibodies in chickens, using a laboratory antibody test in our own lab. The reason for the chickens is that the endemic cycle of encephalitis is a bird-mosquito/bird-mosquito type of cycle.

EIR: Does this mean that the virus breeds in the bird and the mosquito then picks it up from the bird?

Hazeltine: Right. It's an amplification in both stages. That is, the mosquito amplifies it, feeds on a chicken or another bird, the bird develops a viremia, and the mosquito that feeds on that bird will then pick up the virus, amplify it more in his body, and then feed on another bird.

mosquitoes virus

EIR: So the virus actually becomes stronger.

Hazeltine: It becomes more numerous; the virus particles become more numerous in both the chicken and the bird. If any of those mosquitoes that have fed in a blood meal on an infected bird then happen to feed on a horse or a man, transmission of the virus can occur. So we are looking at virus present in the mosquito as one stage short of transmission to people and to horses.

EIR: Now that you have found this outbreak of the virus among the mosquitoes, what do you do?

Hazeltine: Our first move is to increase the level of control that we apply. That is, we work harder on the disease species. And we work harder on protecting people from being bitten by adult mosquitoes. One of the ways we'll do it is with aerosol insecticides, trying to kill the adult population near where people live. This means that we oftentimes have to neglect the people who live way out in the country by themselves. Our aim now is to try to protect the greatest number of people, so we do a little less larval control, and more adult control.

EIR: You mentioned previously that you had severe budget cuts in your mosquito abatement program. How does that affect a project like this?

Hazeltine: It's obvious that if you don't have money, you can't spend it. Our budget cuts have come over the years. Now the state is spending more of its efforts on diseases like AIDS, so that they do not have the time nor the resources to devote to the diseases that are vectored by mosquitoes. What happens is that you have less people to work with, you have less money to buy chemicals, and you lose the control. And so the public is at a higher risk.

EIR: Where does the WEE virus come from?

Hazeltine: I wish we knew. There are various theories. One theory is that it overwinters in tropical areas and is spread by migratory birds. Another theory is that it might overwinter even here, but at very low levels in overwintering mosquitoes. Then, during the next spring, it is amplified and built up enough in order to cycle into horses and man.

EIR: How does this Western equine encephalitis differ from

St. Louis encephalitis?

Hazeltine: It is a different virus, with a different genetic makeup and different antibodies. The determination of the kind of virus is based upon determining the specific antibodies. In severe cases, you can have epidemics of either or both. The St. Louis virus affects only people, while WEE affects both people and horses. . . .

The odds makers, the experts, guess that only about 1 in 100 cases actually have a diagnosable disease, a diagnosable encephalitis. Most of the time they think you have a mild infection, like a summer cold. . . . But pregnant females can pass the disease on to the fetus. In the 1952 encephalitis epidemic in western California, this was determined when a mother carrying identical twins developed the disease during the epidemic, and both twins had brain damage.

In the 1952 epidemic in California, there were somewhere in the neighborhood of 300 diagnosed human cases and quite a few deaths. With the very young, it is a progressive condition, a diminishment of capacity. The viremia is only short term, but the neurological damage is progressive; humans become vegetables. . . .

I had a good friend a number of years ago that caught Western encephalitis. I saw him in the hospital for a week. He was clear out of it. It took him about eight months to recover, to get back to speed. That was eight months of nursing care, eight months of rehabilitation. If you stop to think of the cost there and the social cost—it's a lot of money.

EIR: Have there been other epidemics?

Hazeltine: There was a Texas epidemic in 1964-65, first in Dallas and then a year or two later, a big one in Houston. In both epidemics, they flew military aircraft to spray, to try and control the adult mosquito population. They sprayed the whole town, with six military aircraft, big military cargo planes. . . . Today, the public hysteria would probably militate against such spraying. Or the permission to do it would be given after it's too late.

EIR: We need population control for mosquitoes!

Hazeltine: Researchers were working on a chemical that blocked the process of tanning of the exoskeleton after a molt. This made a defective insect, which would die. . . . When an insect metamorphoses at each molt, it has to develop and harden its outer skeleton in order to function, and this material blocked the hardening of the skeleton so the mosquitoes couldn't fly. There are muscles that depend on the hard outer skeleton, so its movements were ineffective.

EIR: What happened to that as a mosquito control?

Hazeltine: It got falsely labeled as a carcinogen. It was called Dimilin, and my understanding is that there was an equivocal test for cancer with mice, so it had to be redone. That set the whole program back two or three years and amounted to a lot of money. Pretty soon, the cost to develop the material apparently got too high. Mosquito control is a

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very small dollar market. It doesn't produce the big bucks that are necessary in order to finance the development of products that are only for mosquitoes. Even for the specialized-use labeling that goes with it, it is very difficult to get a general use-product labeled for mosquito control because it is an extra step and an extra label.

EIR: Was this being developed privately?

Hazeltine: Yes, by one of the major chemical companies.

EIR: So because of the tests required to determine whether it caused cancer in mice, it was not considered cost effective for the company to develop it as a marketable product?

Hazeltine: Apparently that was the reason. Now, it is sold for use on mushrooms and cotton. But in order to get the special labeling that is necessary . . . you have to spend a lot of money to prove that you can't cause the material to produce unreasonable effects in some animals. . . . It takes money to produce negative data. It costs money to prove that you can't do something, that you can't cause an effect. . . .

There is an organization called the IR4 program, an interregional committee founded by a U. S. Department of Agriculture committee. They will look at a product, if a manufacturer says okay, if you can get it registered for the use, we will carry the label. The program then does the necessary residue work or whatever has to be done, to get permission. They will usually do the laboratory work required for the development of a new insecticide for the the six major crops—corn, wheat, cotton—and tree fruits. But when it comes to health, this is not a top dollar market, even though it's a very important market. One of the things I've been trying to do, is to get the federal government to make special concessions for products that are being developed for public health, to waive the fees.

EIR: Are these Environmental Protection Agency fees? Hazeltine: Yes. EPA has registration fees. EPA does not cover the cost of development, and after you get it developed, there are fees to register it, and there are fees for residue quarantine. But these fees would be waived, then there would be an incentive to get these things developed for public health. . . . The fees used to be zero. Now they are going for fee authority and fee charges, in order to bring in revenue for EPA.

EIR: But what happened to the idea that you have to protect public health?

Hazeltine: In this whole argument, the other very very important aspect is that when a product is being used for public health, there should be a separate and independent risk/benefit balance, used to establish what can be done safely. What usually happens is you have to meet all the requirements for agricultural use, and then meet some more. And in agricultural use, we could do without a certain amount of an agri-

cultural crop, and we would still be fairly happy. But when it comes to health, it's an entirely different story. I think the benefits side of the equation for health, has never been given sufficient emphasis in the registration process. . . . And as a consequence, we're suffering for available products to do the job.

Health has never had a strong lobby; health protection has never had a strong lobby for this kind of thing. And now, the health protectors, many times, are the people who say, "Let's protect the public from pesticides."

EIR: It's backwards. Here are these people protecting the wildlife, and protecting everyone from unnatural substances, when they're going to get some very "natural" virus killing them off.

Hazeltine: That's part of the idiocy that is called regulation. . . . The squelching of the development of new chemicals; all of the prejudice that goes with trying to use currently available chemicals. In all, public health comes out second best. Sooner or later, people are going to die. . . . We tell people, there is a risk to your health right now, in the case of encephalitis. We tell them. Our public here is susceptible to this. Try to avoid being bitten by mosquitoes. . . .

EIR: Human life seems to be cheap for all these people who protect the wildlife and want to protect individuals from pesticides.

Hazeltine: That's the whole point; they seem to prefer birds to people. When you pin those people down, they say, "oh no, people are more important." But that's rhetoric; when it comes right down to it—the environmental impact statements and the litigation for wildlife, compared to the litigation for health protection—wildlife always comes out ahead. . . . Many of the federal laws like those governing the Army Corps of Engineers and the Clean Water Act . . . there's no suggestion that I can find in those laws that requires a consideration of the health impact.

EIR: I found only one mention, and it concerned emergency action

Hazeltine: That was an emergency consideration of a an application. In other words, they could speed up an application. They could speed up the consideration of an application. But there's no statutory base that I can find, nor administrative base, that says if you have a bona fide epidemic, or a bona fide emergency, that you waive all of the requirements. In an emergency, you don't play around and fill out papers, you don't worry about filling them out and processing them. You just forget about it and go about doing the most important thing—

EIR: —to stop the epidemic— **Hazeltine:** That's number one.