2,4,5-T for rangeland brush control over a 20-year period. Water from this watershed was collected in a reservoir. Samples of two species of fish, bottom sediment, and water from this reservoir were examined for TCDD. Again, none was detected at the 10 ppt level.

In 1979, Garcia *et al.* (*2*) in Texas reported on studies of the search for TCDD in the American coot. These studies revealed the absence of TCDD and the presence of 2,4,5-T only at the part per billion (ppb) level in coot body tissue.

Additional studies by Garcia searching for TCDD in soils, lake sediments, turtles, and fish from watershed areas in Texas where 2,4,5-T has been applied have been negative (*3*). None of the samples collected over a 13-month period contained TCDD.

Newton and Snyder (*4*) conducted studies searching for TCDD in mountain beavers feeding in areas sprayed with 2,4,5-T. The livers of the animals were analyzed for TCDD. The minimum detectable levels ranged from 3 to 17 ppt. At this level only one sample showed a *possible* positive reading at 3 ppt (readings at that level can be caused or influenced by several factors). All other samples were negative.

The negative findings in the search for TCDD in the environment from agricultural uses of 2,4,5-T support the studies of Crosby *et al.* (*5*), in which they found that the herbicide formulations exposed to natural sunlight on leaves, soil, and glass plates lost most or all of the TCDD during a single day.

One might consider the detection of 2,4,5-T in rural areas as an indicator of the possible presence of TCDD. Two recent reports on this subject lend further credence to the unlikely occurrence of TCDD in the environment where 2,4,5-T has been used. One study was reported by the Environmental Protection Agency (*6*) in which 48 samples of catfish/crayfish, reservoir water, and sediment were examined. Only one sample of surface water contained 0.03 ppb of 2,4,5-T. In another study (*7*) regarding their food monitoring program recently released by the Food and Drug Administration, no 2,4,5-T was reported in either 1978 or 1979.

The question of burning sprayed vegetation frequently is raised in discussing forestry uses of 2,4,5-T. It is very difficult to design any kind of research that adequately covers all the factors that need to be considered. Studies conducted in Texas by Baur *et al.* (*8*) have shown that residues of 2,4,5-T in sprayed live oak trees 6 months after spraying were less than 1 part per million (ppm). Burning sprayed trees is not a regular practice, but it may be done where it is desirable to remove unsightly dead trees. Burning, if desired, is generally done when the trees and brush have become dry enough to burn easily. This period of time varies from 2 to 5 years after spraying. Under laboratory conditions, it has been determined by Stehl *et al.* (*9*) that 0.00016 percent of the 2,4,5-T in plant parts when burned might be converted to TCDD. Thus, if there were 1 ppm 2,4,5-T in the wood being burned, the amount of TCDD produced would be insignificant.

The speculative assumption made by Westing that TCDD will occur in the environment is not supported by the actual studies noted above and conducted in the field in the search for TCDD in areas under heavy agricultural use. The responses reported in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel Report of 27 September 1979 (*10*) also support this position. Specific questions by EPA to the panel were related to issues about exposure in rice-growing areas, and the panel's response was that " . . . insufficient data was presented or made available to the Panel in support of the argument that human exposure from spray drift and the water environment is likely to be broad or substantial."

Considering the field studies mentioned here and the evaluation made by the FIFRA Scientific Advisory Panel, it would appear that well-qualified scientists have concluded that the likelihood of TCDD residues occurring in the environment from applications of the herbicide 2,4,5-T is extremely remote.

In light of the recent studies reported from the United States and Europe on chlorinated dioxins resulting from combustion, one would conclude that in certain geographic areas TCDD might be found in environmental samples from sources other than the herbicide (*11*).

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Atlantic Hot Springs?

Richard A. Kerr, in his article "How is new ocean crust formed?" (Research News, 14 Sept., p. 1115), repeatedly states incorrectly that no submarine hot springs have been found in the Atlantic. The TAG (Trans-Atlantic Geotraverse) Hydrothermal Field, a site of hot springs and hydrothermal metal deposits, was discovered on the mid-Atlantic ridge at latitude 26°N in 1972 and is well documented in the scientific literature (*1*). It is the first active submarine hydrothermal field found on any oceanic ridge.

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In my article, I stated that ". . . no hot springs have been found in the Atlantic, [but] several different kinds of evidence indicate that they are there." The evidence in the TAG area does not as yet include any visual or photographic observations. As long as unequivocal direct observations are unavailable, the consensus seems to be that active hot springs in the TAG area are a strong possibility, but they have not been found.

—RICHARD A. KERR

Erratum: In the report by Ballou *et al.* "Tumor location detected with radioactively labeled monoclonal antibody and external scintigraphy" (16 Nov., p. 844), the abstract should have read: *Murine teratocarcinomas were located in mice by external γ-ray scintigraphy with a ^{131}I-labeled monoclonal antibody specific to the tumors. The specificity of the method was increased by subtracting the radiation produced by a ^{123}I-labeled indifferent monoclonal antibody of the same immunoglobulin class as the tumor-specific antibody.*