

GREEN LIVING

- By Cile Downs

The Treated Wood Problem

"Avoid it like the plague" — as they used to say where I grew up — that's my advice on treated wood. We now have a total ban on the use of CCA treated wood in New York State. About time. It would be wonderful if people would remove it from wherever they have used it, especially if it's still fairly new and shedding its poison, but I suppose that's unlikely. The trouble with it was the three metals in it: copper, chromium and arsenic, of which the most obviously bad was arsenic. CCA wood was used for decks and (try to believe this) playground equipment, where children could pick up arsenic on their hands and, of course, put hands in mouths. Come to think of it, who wants arsenic in the deck where they dine out in summer? Sure enough, the Environmental Protection Agency thought it over and prohibited CCA wood for these uses.



But its effect on marine organisms was another reason for the State ban, since it was used in docks and bulkheading, too. Two old friends of mine performed an impressive series of experiments and wrote many papers on this subject. Along with many other such sources, they may well have been instrumental in producing the change of heart that led to termination of its use, at least in this state.

They are the Doctors Weis, Judith and Peddrick, highly regarded marine biologists. We had a talk in which they described what they had done to study the effects of CCA in marine environments between the late 80's and the late 90's, and it was a fascinating tale.

There were suspicions already that CCA chemicals were leaching out into the water and affecting marine organisms. The Weises tested this hypothesis meticulously, always with controls. They worked in the lab and they went out into the field: here, in New Jersey, up and down the east coast from South Carolina to Cape Cod, and on the Gulf coast of Florida. They measured the uptake of the chemicals into sediments and their organisms at different distances from the treated wood. It soon became obvious that the numbers and diversity of



benthic animals (marine organisms) were always lower right next to treated wood than farther away or right next to bulkheads made of other material. There were dramatic stories of snails, seaweed called sea lettuce, killifish eggs and fiddler crabs that were put into containers with treated wood. They showed the effects in a matter of days. The snails retreated into their shells and, if kept in the container, died; if removed while still alive, they would recover. Snails fed oysters that had lived on treated bulkheads lost their appetite and stopped growing. I was sorry to hear about the poor snails, but thought they gave their lives in a good cause.

So what is replacing CCA treated wood? There are several substitutes being used in construction now, including a recycled plastic "wood" (that I, in an earlier column, said "might be a good trade-off" to replace wood used in water, since it would save trees.) Also there are other chemically treated woods, for example, ACQ, the current favorite. It is reckless and irresponsible, in my opinion, to put these products into use before doing the kind of thoroughgoing investigation the Weises did on CCA. This is what the precautionary principle is all about: look into it in advance instead of waiting until there's a lot of damage to look into. Judith Weis tells me that just knowing there is copper in the mixture should be enough to bring about a ban in and near water, as copper, also present in ACQ, is the ingredient responsible for the dire effects on marine organisms that they observed. And, in fact, ACQ leaches *more* copper into the water than CCA. "Use it for the deck, but not the dock" she said.

To my great satisfaction, I can report that the Town of East Hampton now has a ban on ACQ use in water, near water, even near wetlands, according to the Building Department. "Would that apply everywhere in the Harbor Protection Overlay District?" I asked. The answer was "yes". At least here *this* treatment will not be used dangerously for years before someone proves it's a killer.

Personally, I refuse to use *any* treated wood on my property on the theory that what kills marine organisms will probably kill other organisms, too. Its progress through soil would be relatively slow compared to that in water, but there is rain, there is groundwater, and in any case, the pollution might be permanent or close to it. Better safe than sorry. I recommend being watchful and remembering that wood is one thing you *don't want* to look green.