

MEMORY, LOVE, DISTORTION, POWER WHAT IS A MAP?

by Denis Wood

Faithful companions, habit and sloth, predispose us to think of maps as pictures, if pictures with a special, even unique, claim to accuracy and truth. But maps aren't pictures. A lot more like language, maps aren't language either, but a sign system all their own. But they're sort of a "language," one that lets us think together graphically instead of verbally. That is, maps are more a way of talking, joking, fighting—discouraging about the world, than of "picturing" it.

What we discourse about with maps is our relationship to the territory we inhabit. A map is a way of linking ourselves to this territory, and to what comes with it, linking ourselves to "natural" things like the incidence of rainfall and the likelihood of earthquakes, but also to "cultural" things like military obligation and the days of the week on which the leaves will be collected.

Maps achieve this linkage by gathering up accumulated labor and thought (about rainfall and earthquakes, military service and leaf disposal) so that it can remain a continuing part of our life. What is gathered up is not the world, but the threads of our relationship to the world.

In fact, the making of maps is one of the ways this relationship unfolds. In this way, maps are also a lot like calluses. I lift weights and I have calluses on my palms where I hold the bar. I used to think these calluses were nothing but a consequence of weight lifting, but I've come to appreciate the way the calluses prepare me for what I'm doing. Like maps, calluses bring forward an aspect of the past (the way I gripped the bar) so that it can become part of my living *now* (so I can lift the bar without hurting my hands). This is equivalent to saying that calluses are a kind of memory; and if not of the bar (if not of the world) then of the way I grip it (that is, of my relationship to the world).

But then memory itself is a kind of callus. Increasingly neurophysiologists talk about memory this way, calling it a function of the "plasticity of neurons." This refers to the way neurons grow or shrink—or otherwise change the way they work—as a consequence of their local histories (as the skin of my hands changed as a consequence of its local history). Increased activity in a neural pathway "strengthens"

that neural pathway; sometimes this is called "long-term potentiation," but we could also think about it as a kind of callus. This "strengthening" is manifested as changes in synaptic membranes, in second-messenger systems, in the activation of genes and the growth of new neural connections. This change in neural anatomy—rooted in past behavior—reorients the whole body toward its environment in a way that is anticipatory and predictive.

Maps are like calluses because their creation signals and instantiates a local thickening—of interest. And they are like brains because their existence and continuous updating manifests in their interconnections a continual reorientation of those who make and use them...*that is predictive and anticipatory*. That is, as calluses invoke for the skin of the hand its relationship with the bar, and the brain invokes for the body its relationship with its environment, maps, as systems of signs, invoke for society its relationship with the territory it inhabits. Because it invokes the relationship (it is not a picture of the world but of the way we inhabit it), the map is colored by the character of this relationship. Some relationships are closer, others more distant; some are hateful, others more loving. Maps actually encode love affairs and rapes, court cases and wars. It is love that selects the features on the map, or lust; it is law or strategy that determines what shall be shown, or hidden. Because humans are a naturally occurring feature of the territory they inhabit, maps recursively invoke relationships of humans to humans.

Since maps are a kind of thinking out loud—that is, a kind of communication—the particular thread of the human-environment relationship invoked will depend on the communication situation calling it forth. Situations that call for laying down the law, call forth maps that lay down the law (property maps, maps of voting districts, simple black lines: you're in or you're out). Situations that call for passionate suasion, call forth maps that passionately persuade (incendiary propaganda maps, cartoon maps, ironic maps, satirical maps). Situations that call for analysis, call forth cool maps (weather maps, computer printouts zealous in their dispassion). Situations that call for

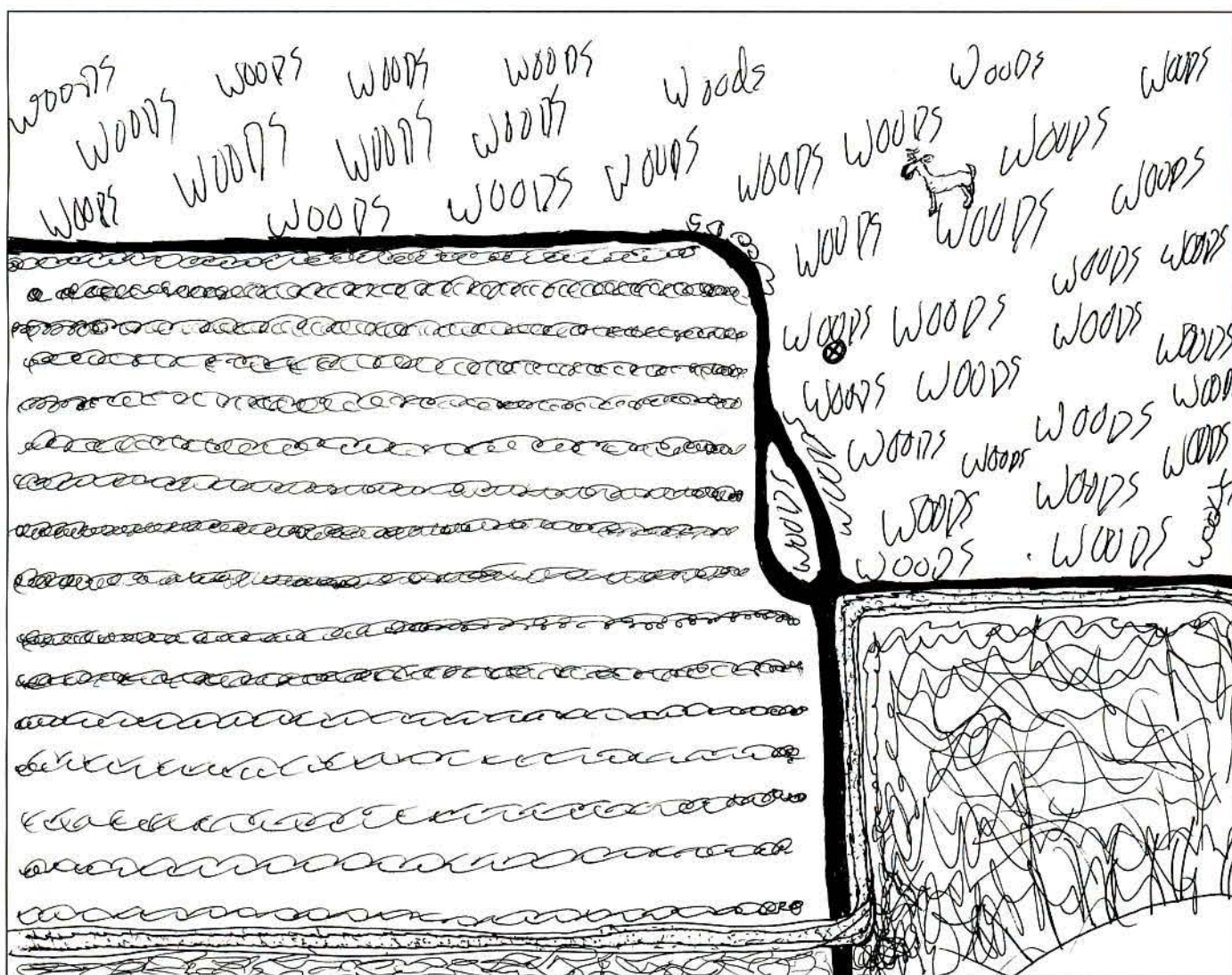
love call forth maps that make love (maps of pet names, maps of favorite walks and favorite places, maps that caress the land).

Each communication situation concerned with our relationship to the environment calls forth—invokes—the graphic expression of linkages that is most apt. Each of the maps in this portfolio is the graphic expression of a thread

of our relationship to the environment called forth by a particular communication situation. Some are tender, some are cruel. Some are blatant, others cool. Several caress the land. A few grab it. One is the graphic expression of a violent act. But none is an onlooker. They're all involved. Because maps *never* just describe our relationship to the environment—they help bring it into being.

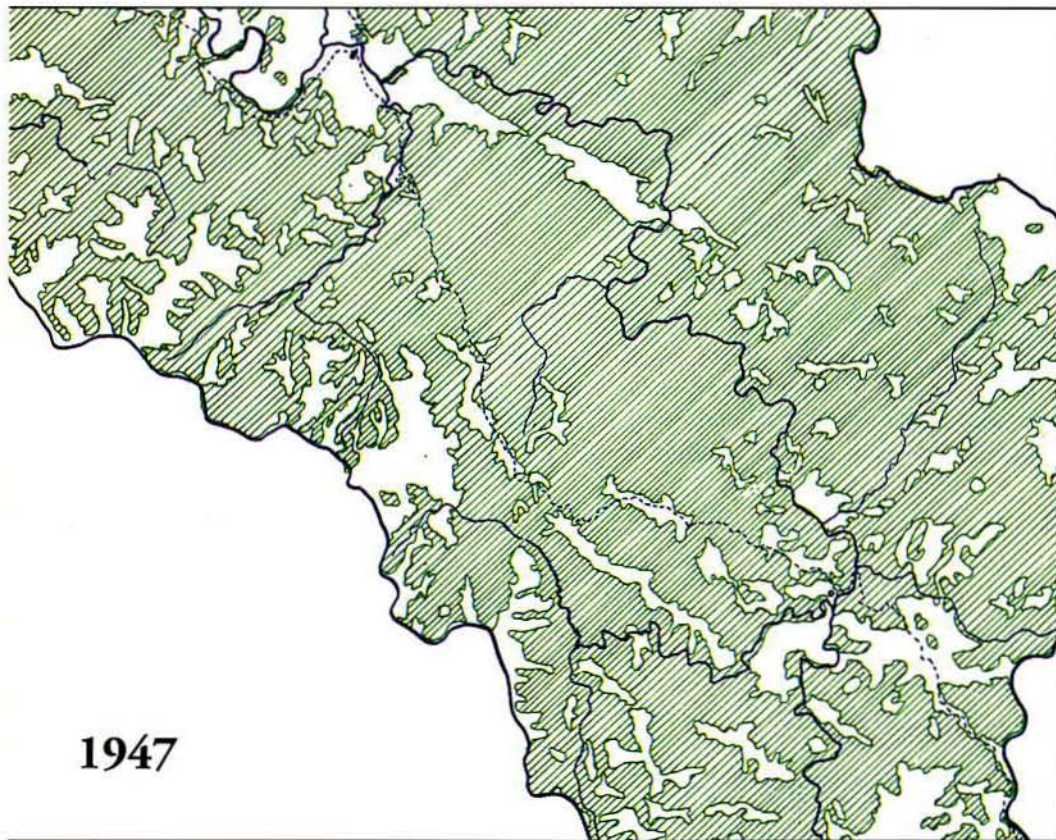


This portfolio is designed to explore a variety of issues through maps that vary as widely in appearance as in subject, motive, and mode of production. All the maps manifest an intimate relationship with the land. But the maps vary in the nature of this intimacy. Furthermore, they vary in the extent to which their production has, in and of itself, changed the land they map.



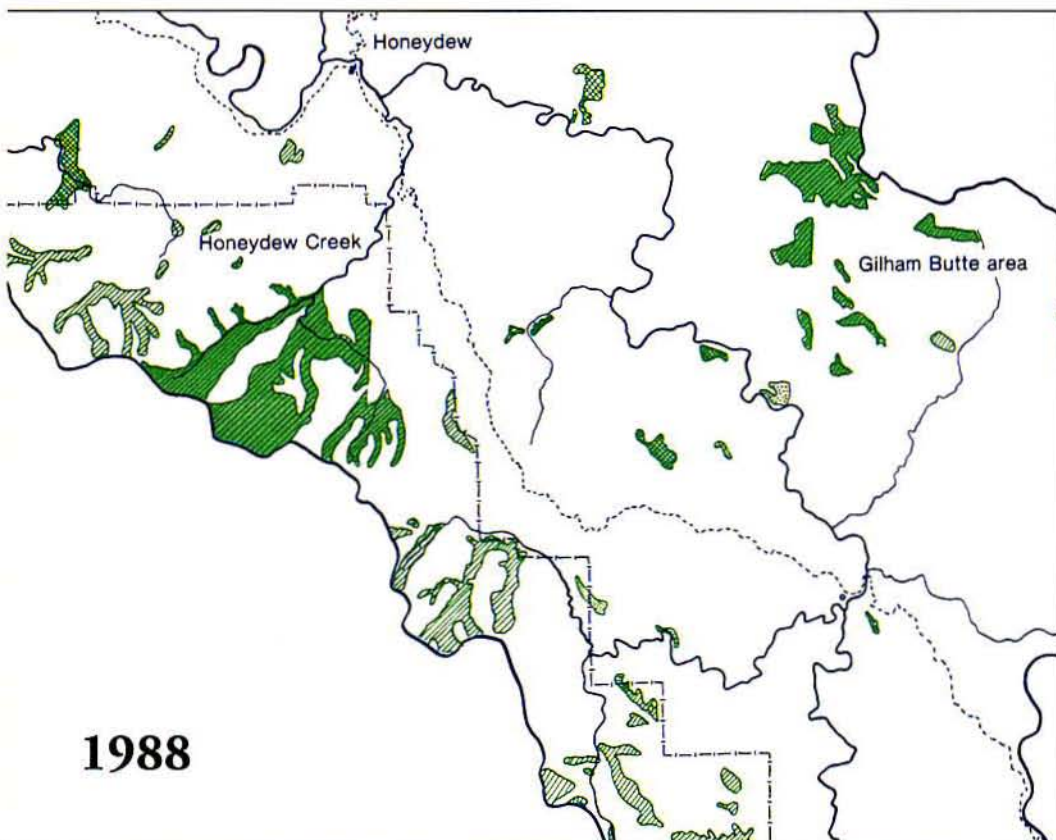
KELLY LENZ, 1993

In the aureate glow of an autumn afternoon, Kelly watches the fingers of the forest stretch across the field of soybeans as if waving away the deer for which he waits. Kelly, a young friend, had been trying to explain why sitting all day in a deer stand hadn't been boring, when he observed that I wasn't following him. Grabbing a pen he carefully drew this sketch. Caught here is Kelly's caress of the land that caressed him, and the deer (center) in the light of the sun (lower right). But caught in the same gesture is the human subjugation of the land (the map grabs the land), the canals draining it, the forest cleared for soybeans and cotton, the deer stand nailed up in the tree from which to...terminate the deer. All the potentials of the map are prefigured here.



1947

This map seems to be about trees, but it's really about salmon. The map was constructed by Mattole River area residents in northern California who became alarmed by declines in the area's king salmon population. The people first learned that, if they wanted to help the salmon, they must think about the land as the fish might. They must think about the land as a watershed, realizing that salmon depend on streams, and streams in turn depend upon trees. From human "experts" the Mattole residents learned how little was known about the watershed (it was large—306 square miles—and remote, and records were nonexistent, sparse, or dispersed among many owners and agencies). By learning all they could, and making this map, the people of the watershed have changed the way they think about their lives.



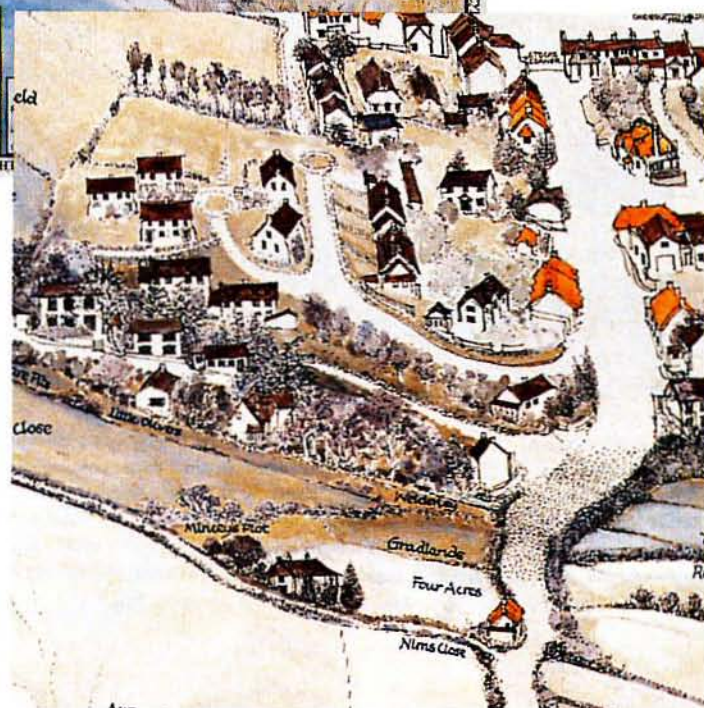
1988

© 1989 MATTOLE RESTORATION COUNCIL, PETROLIA, CA



© 1990 COMMON GROUND, PARISH MAPS PROJECT, CHIDECK, ENGLAND

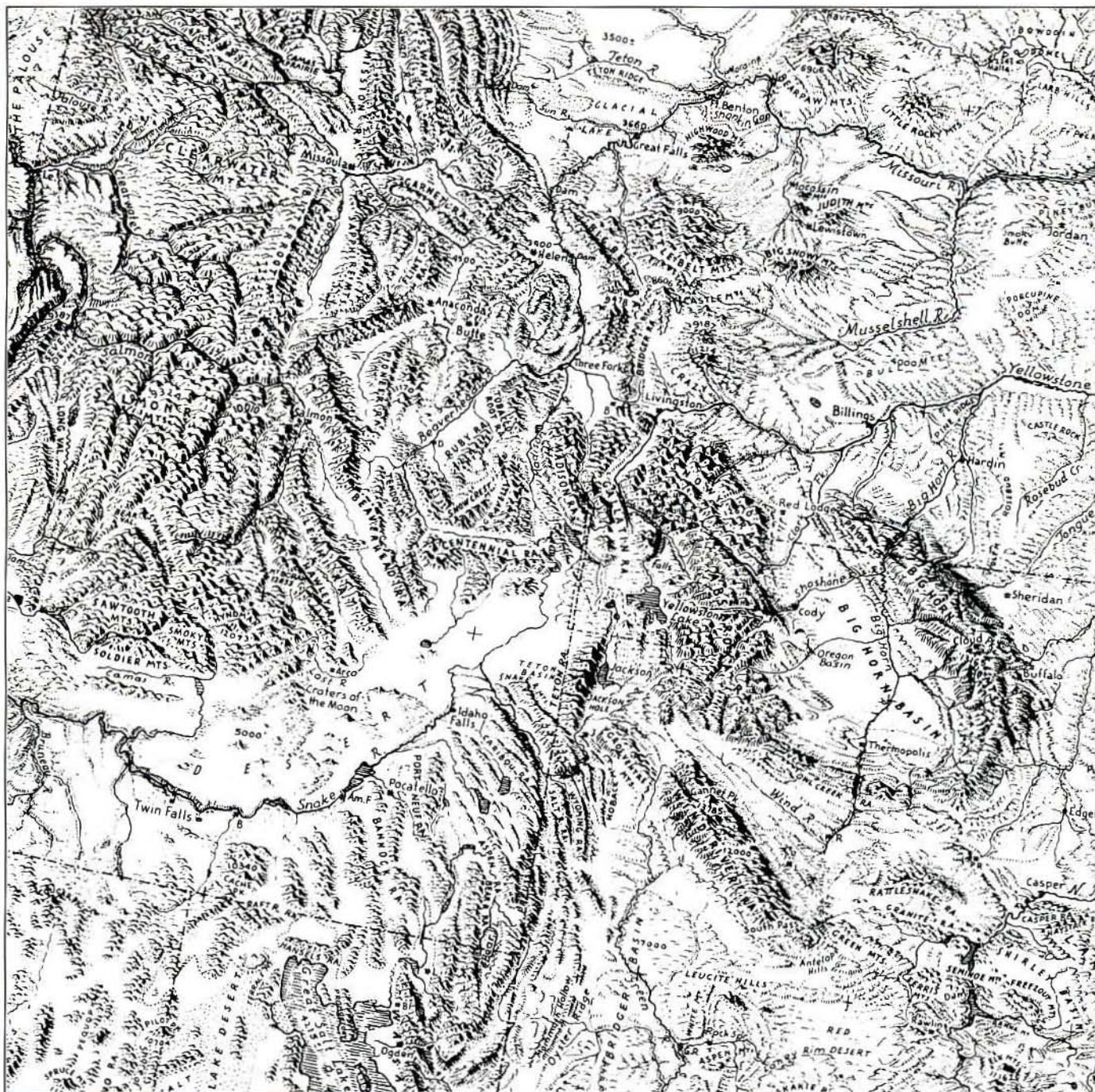
Know Your Place. Make a Map of It! Making every local person an expert has been a guiding principle of Common Ground, the English group whose Parish Maps Project has inspired hundreds of communities to map the territories they inhabit. Chideock, in Dorset, England, is one of these communities, and this map was drawn and painted by Gillian M. Moores based on information collected by the people of Chideock. As part of this project, photographic records of the streets are being made, and footpath guides to the fauna and flora. As a result of their making this map, a Chideock Society has been formed to fight local issues. This tightens the hold of inhabitants on the land, but the grip is that of one hauling a loved one back from the brink.





NORTH AMERICA AT NIGHT © 1993 W. T. SULLIVAN, III

Through the ringing transparency of a cloudless night, the lights of North America illuminate the way we lie on the land. Woody Sullivan, an astronomer, made this map by piecing together and reprocessing carefully selected satellite images of the earth at night. His map raises a voice in many conversations. Among these is that of astronomers alarmed about the "light pollution" that savages their observations. "But is there not a wider loss?" Sullivan wonders. "The image testifies that millions of people today have no dark sky and are thus denied the nighttime universe. No longer do they know the exquisite thrill of a meteor shooting across the sky, nor the humility brought on by the resplendence of two thousand stars wreathed by the Milky Way. At a time when the very survival of our species depends on finding a common vision, we have wrapped the earth in a glowing fog."



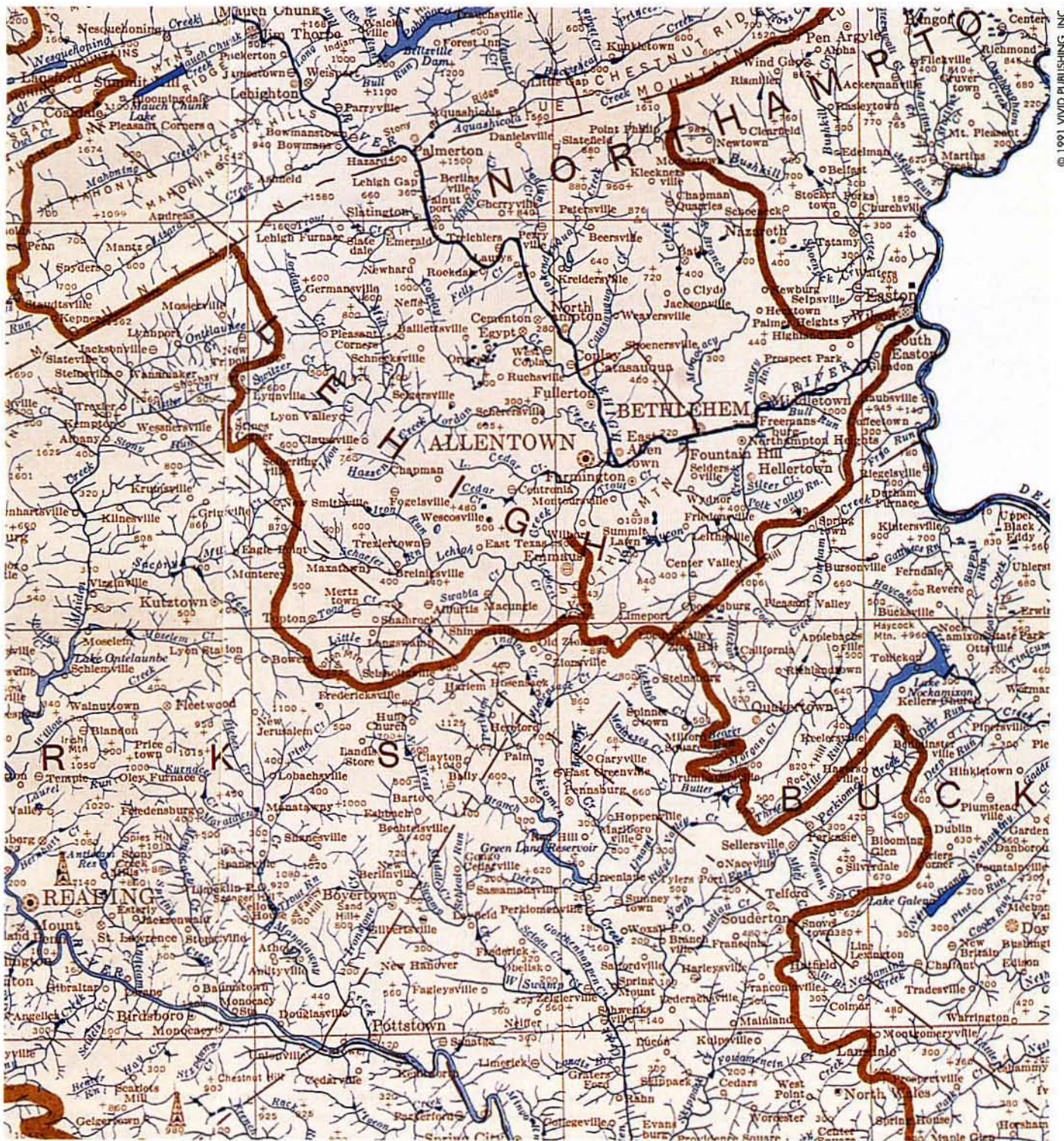
Like a body stripped of its clothing, Erwin Raisz's "Landforms of the United States" offers us the lay of the land. Or so it would seem. Actually, beneath the vivid but highly arbitrary portrayal of landforms, lies a wealth of "cultural" information: nominal, urban, political. Yet all has been subordinated to Raisz's commitment (for this too is a committed map) to share with us his interest in *physiography*, that is, in the "natural" features of valley and hill, plain and plateau. Relying on only aerial photographs and field observations, Raisz originally drew this map in 1939. This sixth edition, revised in 1957, retains all of its essential characteristics. In this twenty-fifth anniversary of Raisz's death, it is worth recalling his dictum that, "The camera is fast, accurate, and effortless, yet sketching has many advantages."



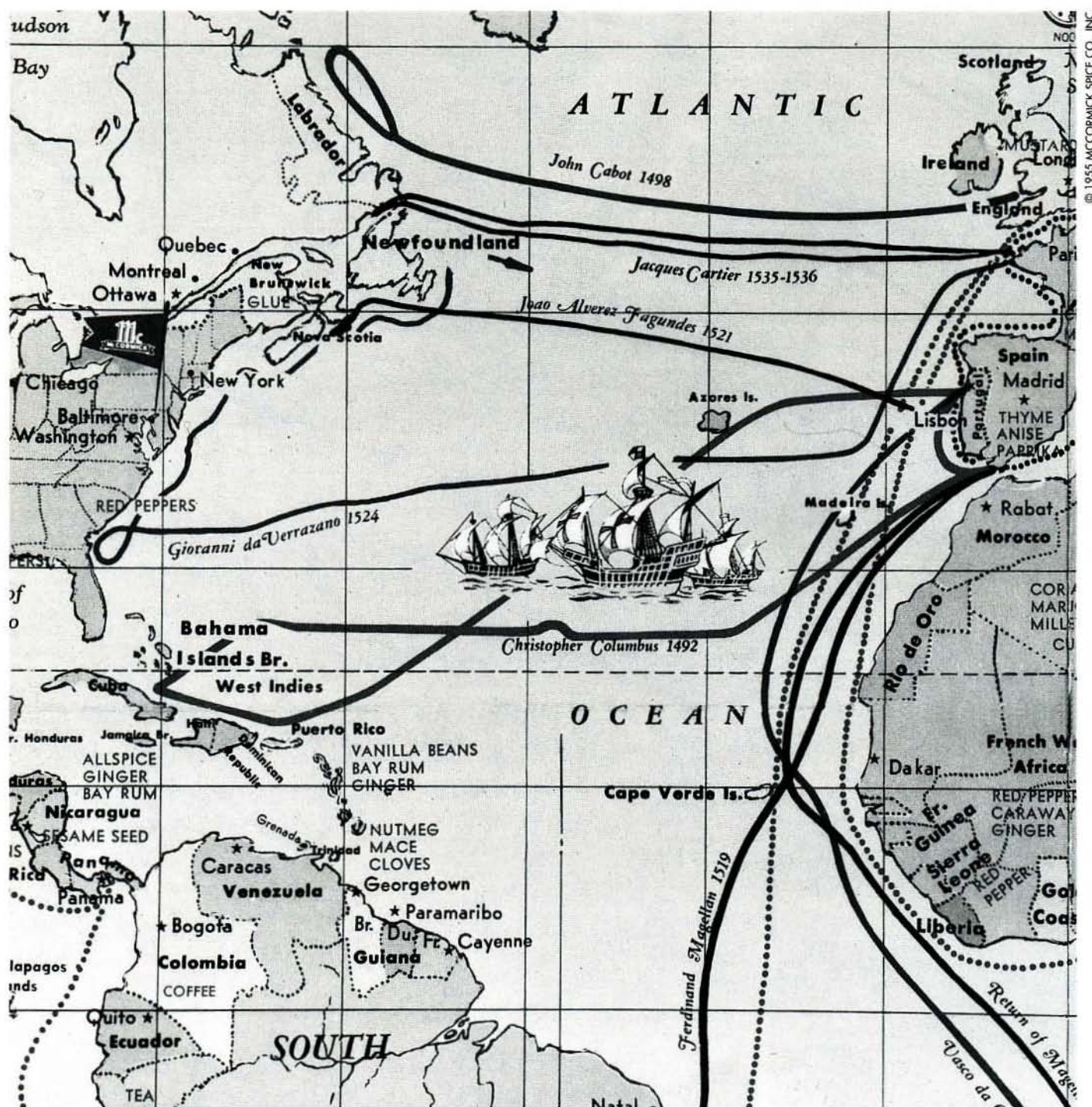
THE COMMON GROUND APPLE MAP © 1993 COMMON GROUND



The Apple We Eat Is the Landscape We Create. This map builds on the idea of parish maps by answering the question, "What makes one place different from another?" England still has 6,000 varieties of apples for eating, for cooking, for making cider. But in the last thirty years, the number of varieties has declined, and 150,000 acres of orchards have vanished. This Common Ground map leaps into the fray: "Recapture the Flavour of Your Locality—Every Apple Has Its Place," it eagerly proposes, along with practical suggestions for creating community, school, and city orchards. How would Raisz feel about this map? He would acknowledge its kinship, for in its way it too is a map of "natural" features.

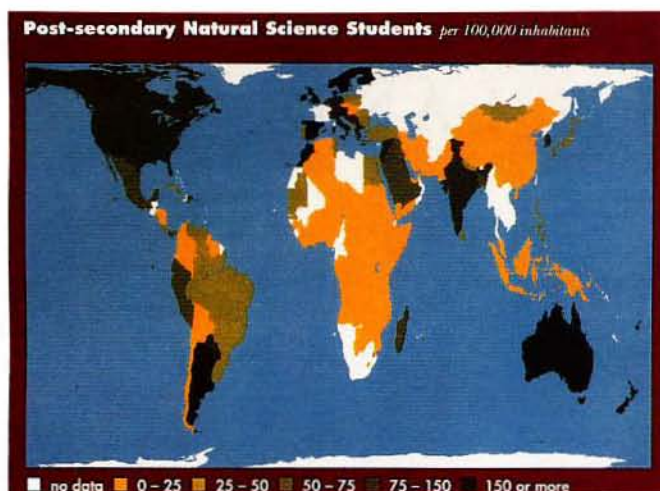


A love of trout brought this map into being. The collage of apples that conspires to create the Common Ground Apple Map is self-evident, but Howard Wm. Higbee's Stream Map of Pennsylvania, where the collage is less evident, is no less a collage. For example, here's one marginal note: "Base map assembly is from U.S. and Pennsylvania Geological Survey Maps, U.S. and Pennsylvania Soil Survey Maps and other unpublished field surveys." Here's another: "Site location for several dams, lakes and reservoirs was obtained through the courtesy of Army Corps of Engineers, Pennsylvania Game Commission, Pennsylvania Fish Commission, Pennsylvania Department of Forests and Waters and The Pennsylvania State Geological Survey." This huge effort of collation, of filtering and layering-of collage-has been expended in the service of fishing for trout (whose conservation is supported by sales of the map). How much more intimate with the land can you get?

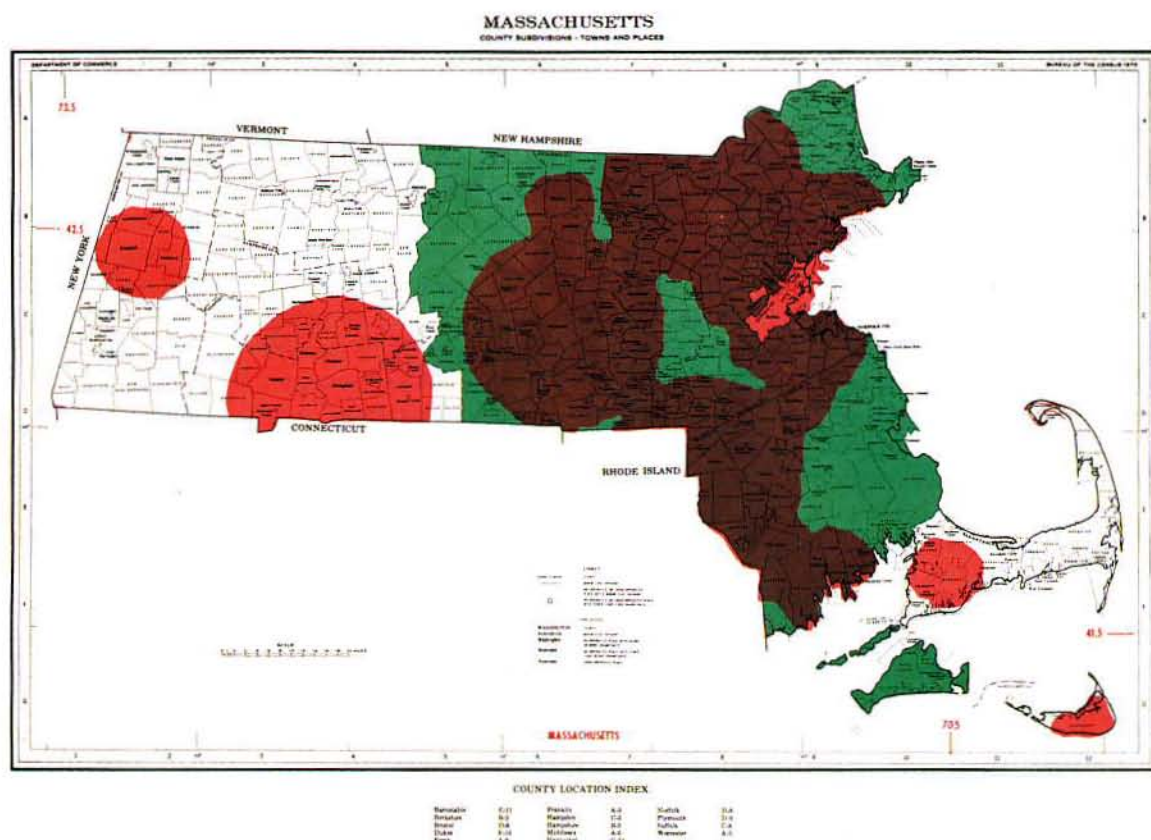


Buy McCormick! Every inventory involves a claim. That made by McCormick's Map of the World is more comprehensive than that made by Knowle Church Parish: "McCormick: From All the World, Known the World Over." Wind gods and explorer's routes, vignettes of spice collection and national flags, signs of the zodiac and Fort McHenry embattled, what of the world—in its beguiling innocence—does it fail to remark? The whole thing, explored, claimed, exploited, in the name of an America under whose flag its citizens sip their McCormick tea. Evidently, intimacy does not imply a caress. And yet, what is the difference between this map and the apple map, the map of Knowle Church Parish? It is that between a smile...and a leer.

Denis Wood, a geographer, grew up in Cleveland, Ohio, on the banks of the Cuyahoga River. A former high school instructor, he currently teaches environmental psychology to design students at North Carolina State University's School of Design. Author of The Power of Maps, he is co-author of the just-published Home Rules.



To know her is to love her. It's just a line from a song, but if it's true, this map by Conservation International suggests that we may be in for some less than loving times. True, natural science study on the European model is not the only way to know the world, but would a map of the per capita incidence of poets give greater cause for hope? Where knowledge is in the hands of the few—the corporations, the experts—popular intimacy with the land is hard to come by. Yet we can only really know the world *collectively*, as a people. All knowledge is ultimately cultural, pooled in time, and passed on from generation to generation. When this transmission is impaired, knowledge is lost—and it is too late start all over.



As if it were possible to rationally contemplate the destruction of the world, the United States Defense Civil Preparedness Agency maps areas in Massachusetts at high risk from direct weapons effects (red), radioactive fallout (green), or both (brown). Based on the 1970 census, on 1973 Defense Mapping Agency maps of defense installations, and on 1975 projections of Soviet nuclear capabilities, the map is like the hangover of a night best forgotten. Yet perhaps the instantaneous obliteration promised by the bomb is preferable to the slow death promised by ignorance and growth. The more recent maps in this portfolio point out a third direction. Shaking off habit and sloth, they use maps to speak of another end: one, founded in a militant and popular knowledge, of a truly loving intimacy with the land.