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OWNERSHIP AND ECOLOGY

Eric T. Freyfogle*

Bend down, go in by this low door, despite
The thorn and briar that bar the way

At the core of our contemporary sense of what private property is all about is the individual ownership of land. A land parcel is a precisely bounded portion of the Earth’s surface, a tiny piece of an entirety that is, in nature’s terms, interconnected and indivisible. We take it for granted that a person can own such a piece of the Earth. By “own,” we mean many things, including the right to use and alter the land.

My aim in this essay is to explore this foundational idea of private land ownership. I propose to look, not at the intricate details of our property laws, but at their central organizing elements, at the law’s main messages about what it means to own things — to own this woodlot, that pond, and the distant coal seam. In broad terms, what do we mean when we speak of owning land and other elements of nature? What does this law of ownership tell us about the relationship between people and the Earth? Most importantly, how much ecological wisdom, and how much ecological foolishness, lies embedded within these basic ownership ideas?

My sense is that the law’s basic messages about ownership — its messages, that is, about the human-land tie — are misguided. The flaws are many, and they emerge more plainly as we learn

* Professor of Law, University of Illinois. I wish to thank Bruce Hannon for helpful comments on an early draft. Many of the ideas set forth in this essay are presented in different form in my book, JUSTICE AND THE EARTH: IMAGES FOR OUR PLANETARY FUTURE (1993). This essay was presented at the Arthur W. Fiske Memorial Lecture at Case Western Reserve University School of Law on March 11, 1993, an event made possible by the vision and generosity of Mrs. Alice Fiske White.
more about ecology and gain a greater ability to sense how we are
damaging the Earth. Our environmental predicament is already
grave and it worsens daily. One cause of this predicament — and
an important impediment to change — lies in our legal culture, in
our inherited sense of owning the land.

By all sobering accounts we humans are spoiling and exhaust-
ing the land in ways that are unsustainable and, in human time-
frames, largely irreversible. By land I mean, as did Aldo Leopold
in his penetrating essay, *The Land Ethic*, not just the soil itself
but the entire natural community, including the soils, waters, plants,
and animals. We degrade our natural home by living on the prin-
cipal, by engaging in practices that drain the stability and fertility of
the ecosystems where we live and of which we are an inextricable
part.3

This essay draws upon the writings of many non-lawyers who
have long complained about the roadblocks to ecological progress
that our legal scheme presents, particularly its messages of owner-
ship and private domination. Two samples of that wisdom can help
illustrate this critique and set the stage for what is to follow. First,
from Kentucky farmer and writer Wendell Berry:

> Property belongs to a family of words that, if we can free
> them from the denigrations that shallow politics and social
> fashion have imposed on them, are the words, the ideas,
> that govern our connections with the world and with one
> another: property, proper, appropriate, propriety.4

And from Aldo Leopold:

> Conservation is getting nowhere because it is incompat-
> ible with our Abrahamic concept of land. We abuse land
> because we regard it as a commodity belonging to us.

2. ALDO LEOPOLD, *The Land Ethic*, in A SAND COUNTY ALMANAC AND SKETCHES
HERE AND THERE 201-26 (1949).

3. See, e.g., analyses of the environmental impact of various agricultural and industrial
practices, COUNCIL ON ENVIRONMENTAL QUALITY, TWENTIETH ANNUAL REPORT (1990);
STATE OF THE WORLD: 1991 (Lester R. Brown et al. eds., 1991); UNITED NATIONS
WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, OUR COMMON FUTURE
(1987). An earlier, highly readable survey is BARRY COMMONER, THE CLOSING CIRCLE
(1971) (tracing the manifestation of the environmental crisis in the ecosphere). See also

4. Wendell Berry, *Whose Head is the Farmer Using? Whose Head is Using the Farmer?*,
in MEETING THE EXPECTATIONS OF THE LAND 19, 30 (Wes Jackson et al. eds.,
1984).
When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man, nor for us to reap from it the esthetic harvest it is capable, under science, of contributing to culture.\(^5\)

I. A JOURNEY

To grab hold of the law’s messages on ownership it will help for us to wander out of the law library and leave the law books behind. It will help for us to take a look, briefly, at how ownership norms are interpreted out in the field, by the farmer, the lumberjack and the homebuilder. If the law is important in shaping our dealings with the land, then out on the land is where its importance becomes evident; if the law’s messages are flawed, the flaws will surface here, where the people and the land come together. What I propose is an imaginary journey, a journey to the center of the country, to see what private ownership has meant in terms of the land’s long-term health. For many readers of traditional law journals this journey will seem odd. But it is, for this topic, a necessary and urgent one. The Earth is not a frequent litigator, and it responds mutely to pain. The Earth does not run into our courtrooms to complain about the injuries that it has suffered. We cannot rely on our legal annals alone to tell us whether the law is fulfilling our needs.

The wind-swept plains of the mixed-grass prairie stretch westward out of the fertile lands of Missouri, Iowa and Minnesota, rising gently and unevenly as if on a slow march to the Rockies. As the traveler journeys west into this open land, fields of soybeans and corn in the humid east give way to seemingly endless acres of *Triticum vulgare*, common wheat, the gold of the north plains. Farms are large here, fences are few, and the land is wide and vast.

To the long-distance auto passenger racing by, the old prairie appears monochrome and flat, as much so today as when little bluestem graced the horizon decades ago. To the foot traveler, however, and even more so to the ambling naturalist, the natural

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setting here is rich and diverse. Each acre is the home of new delights.  

Our land-use journey can begin in a small town that is no bigger now than it was during its heydey in the 1890's, a town that rests lightly on the folded ridges and glaciated plains along the Republican River in Nebraska. The town is Red Cloud, in the south-central part of the state, and the countryside that surrounds it is, in many ways, enchanted soil. This place was once the home of Willa Cather, a novelist of great poetic vision and voice.  

Cather lived a century ago on this land of ridges, plains, and slow, shallow rivers, and she left images of the place in her suggestive, emotionally charged style. In ways that Cather expresses, this land around Red Cloud is special soil for any sensitive person who will take to it. This is not any-place or any-land, it is a particular place for the located residents who sink roots here, a very particular one. With Cather's aid we can take this land seriously; we can view it as a place suited for, and deserving of, everlasting life.  

To the north and west of Red Cloud the land is higher and flatter. Fewer acres are left in timber, and the grain fields and cattle pastures press closer together into an unbroken flow of dominated Earth. This is Willa Cather's "Divide," the land between the Republican and Little Blue Rivers that appears so emotively in her fiction. No marker notes the spot, but the tourist armed with a map and patience can easily find the original Cather homestead, spread over a gently swelling, grain-clothed countryside. This is the place to which a young Willa Cather and her family moved from Virginia, during the spring thaw of 1883.  

We imaginary journey will be a short one. We only need a few stops to collect the messages we seek about land and the

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7. Willa Cather lived in Red Cloud from 1883 until she moved to Pittsburgh, Pennsylvania in 1895; thereafter, she returned frequently to Red Cloud for lengthy visits.  
ENCYCLOPEDIA AMERICANA 16 (Int'l. ed. 1990).

8. Cather used this land, in fictionalized form, in many novels (see O PIONEERS! (1913); A SONG OF THE LARK (1915); MY ANTONIA (1918); ONE OF OURS (1922); A LOST LADY (1923); LUCY GAYHEART (1935)), and in numerous short stories (see, e.g., short stories included in YOUTH AND THE BRIGHT MEDUSA (1920) and OBSCURE DESTINIES (1932)).
Along the dusty section road the fully cropped fields, from fencerow to fencerow, display an aura of no-nonsense discipline, a sense of domination with little restraint. This land is put to human use, and intensively, almost exclusively so. Off to the side, on top of a weed-nestled, cedar fencepost, an animal carcass decays in the unbroken sun. It is a coyote, or prairie wolf as Cather’s neighbors might have called it. Poisoned or shot by a neighborhood rancher, the carcass offers quiet evidence of the perils that wildlife face in a human-dominated land, even animals as cagey and opportunistic as the thriving coyote.

A bit further ahead, off toward one horizon, the land gently dips to form a natural collecting spot for surface water run-off. This dip, or “pothole” as the locals would call it, has now been drained, and it offers an annual harvest of dryland grain sorghum. In Cather’s day the wet pothole would have furnished prime wildlife habitat for overflying waterfowl that mark the seasons with their migrations. Today the wetland habitat is gone and the migrating birds are much fewer. The rancher’s bullet kills once and visibly; it is the farmer’s bulldozer and drainage tiles that, more quietly, kill across the generations.

Along the ridge road a scattered herd of cattle quietly clip the grass, soak up the sun, and amble down a draw to a watering creek. At the banks of the cottonwood-lined creek the soil is broken by hooves and extensively eroded. The creek is muddy with soil run-off, which begins its long slow trek to the Gulf of Mexico. Mingling with the suspended soil are fouling animal wastes. From nature’s perspective, there are too many animals in a place that is too small and too sensitive.9

Our imaginary path now cuts back along a field of vibrant corn, an unexpected sight in this land of hard winter wheat. Arching proudly over the green stalks is the tell-tale source: a center-pivot irrigation system. This sprawling, snake-like line spews water in all directions as it makes its ever-so-slow circular path, bringing

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Illinois fertility to the dryer Nebraska plain. This pivot system sinks its roots into the fabled Ogallala aquifer, which, year by year, gives more than it receives as it shrinks and drops, and shrinks and drops. The irrigation run-off leaches the soil in a slow poisoning process, and carries farm pesticides, herbicides, and fertilizers on toward groundwater wells and the Republican and Little Blue Rivers. A few hundred miles to the west these sprawling snakes seem to thrive everywhere, drawing large green dots — temporary dots — on the dry, brown landscape. 10

The land on Cather’s Divide, like most American land, is owned by individuals and families, some who call the place home and others who see the land as investment. What these owners do on their land is, by and large, up to them. Their dealings with the land are guided by images that they carry as to the right relationship between humans and the Earth. One of the most important sources of these images, one of the most central forms of guidance and validation that these landowners receive, is offered to them by our rules on property ownership. With its language and heritage the law tells these owners many things, about the land, about what it means to own land, and about the types of things a landowner can rightly do on and to the land.

II. IMAGES OF OWNING

What does our law of property have to say to the grain farmer and cattle rancher out on Willa Cather’s old Divide? What are the “legal” ways that people relate to the surrounding land, the land that supports and sustains them?

Preeminently, the law sends the message that people are distinct from the land and its component parts. People like our Nebraska farmers are subjects, and the land is merely an object, possessing no moral or legal worth and counting for nothing. There is at work here a distinct dichotomy of subject and object, legally worthy and legally worthless. People are the ones who own and dominate, and the land is the thing that is owned and dominated.

A second message we get from the law is that the countryside

is something that can be divided distinctly by use of the surveyor's

craft and tool. Invisible lines drawn to the fraction of an inch take

on somber meaning, first in plats and deeds, and then as fences

and in the attitudes and acts of the owner. The division goes still

further, as subsurface minerals go to one owner, water to another,

and surface rights to still a third. We offer leases and easements

and covenants and so on, in each instance drawing the land into

yet finer particles with an owner, always, for each. Nature is no

longer a whole: it is a composite of many, differently owned parts.

Each portion of the land, the law suggests, comes under the

control and guidance of its owner, and therefore can be managed

with little regard for its connections with the surrounding parts of

nature. However modest, each land parcel — if not each natural

resource — is some owner's bailiwick or castle, undergirded by

resonances and echoes of centuries past. To be sure, legal and

social restrictions on land use do exist. But such restrictions are

mere exceptions to the presumed independence of the law-endorsed

one who commands; the rule we fall back on, the rule that pro-

vides the core, is that the owner can, for the most part, do as she

likes.

What the law seems to be telling us, from these first legal

images, is that property ownership norms are aspects of civil rights

and have little to do with the things that most people term proper-

ty. Property law does not deal with the rights we have in our

house or our bicycle; they deal with our rights as against other

people with respect to these things.11 A landowner's right to pos-

sess is really his right keep other people away. An owner, the law

suggests, has the right to use, manage, alter, transfer, or destroy as

she sees fit — so long as she respects the similar rights of other

owners — and these are all rights held against the rest of the

world.

At work here is a large and obvious element of abstraction.

People count — the owner and those concerned with what the

owner does or fails to do — and the thing itself — the field or

stream or wetland — fades from the picture. Once the focus shifts

from the thing itself we can consider abstractly whether, for exam-

ple, an owner of property should be able to make a gift of her

property, effective upon her death, without complying with the

11. JOHN E. CRIBBET & CORWIN W. JOHNSON, PRINCIPLES OF THE LAW OF PROPER-

requirements of a valid will. This is the kind of abstract issue that ownership norms take up, and for this kind of work, and in our thinking of property in general, the details of the thing are swept aside.

The sense that arises from the law, in short, is that property law's sole interest is with the relative interests of humans. By important implication, this can also be the owner's only concern. On occasion property law uses an even more restricted vision — that only property-owning humans count — but we need not concern ourselves with this refinement. The point here is that limits on how property can be used are designed principally to divide entitlements among humans. Animals, plants, and other parts of nature all count for nothing. Ecosystems and natural communities, which are the settings for all life, have no independent value or existence.

There are important implications to this property-as-civil-rights focus. One strand, picked out by Lynton Caldwell, is the law's preeminent concern for the present and its disinterest in longer perspectives. Humans have limited lives. When the land is owned by an individual human and is managed for that human's more-or-less exclusive benefit, we must expect, as indeed we find, that long-term degradation of the Earth counts for little. Human communities, other species, and natural ecosystems all have long-range interests, interests that the self-centered individual lacks. When the law's concern lies primarily with the individual owner who lives today it inevitably participates in the sacrifice of the Earth's long-term health.

Because the law's concern lies with identifiable humans, the law counts as injury to property only those things that harm humans today — things that cost the owner money and that are measurable now, in dollars. When a parcel of land suffers an injury — when the soil is eroded, the trees burn, or the birds are


13. Laws regulating hunting are no exception; hunting laws, which are limited to desirable game species, are principally for the benefit of hunters, not the animals themselves. An exception is provided, however, by endangered species laws. E.g., Endangered Species Act, 16 U.S.C. §§ 1531-1544 (1985).

poisoned — our legal culture tells us that the injury is really suffered by the land’s current owner, not by the land itself. The injury, moreover, is equal in amount to the landowner’s proveable financial loss.15 If the land is injured in a way that the market does not value, the injury is irrelevant.

By this decidedly anthropocentric gauge, most plants and animals are valueless and hence immaterial, and the law’s message is that we can rightly ignore them. The message from a distance — the message to the landowner out on the Divide — is that it is of no consequence that topsoil erodes so long as this year’s crop remains strong; it is of no consequence that the coyote is strung up or the creekbank eroded. When we talk in terms of injury measured in today’s dollars we inevitably place great reliance on our ability to see injury, to measure it, and to value it, which is to say that we treat our severely limited knowledge of nature as if it were complete. When money damages are paid the injury is remedied, or so the law tells us, as if the scarred and diminished land somehow benefited by the transfer of mere money. If the owner is paid for his financial loss the injury is healed, the whole has been restored, and the case is closed.

When property lawyers speak of a landowner’s rights they pay precious little attention to the land’s special traits. The law picks a few facts from the mass of allegedly unimportant ones and builds on this skeleton a flesh and blood of legal entitlements. In defining rights we ignore the fact that one tract has special value as wildlife habitat while another does not; that one tract will lose its soil quickly when exposed by the plow; that a creek bank needs special respect. We ignore the details that make Cather’s Divide unlike any other place, that distinguish one farm on the Divide from another.

The law’s message here is that these rich details count for nothing. Rights are abstract, and Blackacre differs at law from Whiteacre only in the identity of the owner. In legal analysis, both parcels are ripped from an ecosystem, from a natural community,

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15. For example, the typical rule in trespass to land is that the landowner’s recovery is equal to the drop in land value caused by the trespass. E.g., Borland v. Sanders Lead Co., 369 So.2d 523, 531 (Ala. 1979) (in cases of trespass causing permanent injury the proper measure of damages is the difference in fair market value before the trespass and after the trespass); Clark v. J.W. Connor & Sons, Inc. 441 So.2d 674, 676 (Fla. App. 1983) (refusing to allow recovery for replacement value of trees destroyed in trespass); but see Porras v. Craig, 675 S.W.2d 503, 506 (Tex. 1984) (if unlawful cutting of trees does not reduce value of property, recovery is allowed for the trees’ intrinsic value).
from the web of all life. When the law in its accumulated wisdom overlooks these peculiarities, who can blame the landowner for doing the same?

To sum up: When we step back from the law's grand canvas the law's messages about ownership are rather simple ones, messages that are easy to push into the subconscious and carry into daily life along with the axe, the plow, and the bulldozer. People count, and the land is meant to be owned and used. We can meaningfully divide the land into discrete parcels and components, and the owner can use her land as she wishes so long as other humans are not materially harmed. Harm is noteworthy only if today's dollars are involved and only if, with our limited knowledge of nature and its workings, we can identify and measure it. An acre is, by and large, an acre, not a special place embedded in a local ecosystem and inextricably bound to the linked forms of life that call it home. Each acre has a price, and it can be bought and consumed, injured and mended, in terms of that price.

These messages have been broadly drawn, to be sure. Our sketch omits limits that cut against the grain — the zoning ordinances, nuisance rules, and the like. Limits like these are important, no doubt, but they merely tug against the dominant images of ownership, as yet far too weak in their own right to give rise to more environmentally sensitive, more sustainable alternatives. These dominant images are the ones rooted in both our legal and our popular subconscious; these are the images that undergird our thinking, and our talking, about what it means to own the land.

III. THE ERRORS

There are many things factually wrong and gravely pernicious about these messages that our vibrant legal culture in its subtle,
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influential ways communicates out to farmers and ranchers on the Divide.\textsuperscript{17}

It is wrong to suggest, as the law now does, that people are separate from the rest of nature; that people are subjects and, as such, distinct and different in kind from nature's objects. We are, in truth, as dependent as any animal or plant on the fertile soil, the water, and the cycles of energy on Earth. If we stand high atop the ecologist's complex food chain, then we are for that reason, all the more dependent on the health of the layers and levels beneath. We nod in agreement when Darwin comments on shared ancestors and biological ties, and yet we ignore the implications of these links and interdependence.\textsuperscript{18} All of us, everywhere, depend on the health of the Earth, and ill health in one place has many ways to spread.

The boundaries that we draw, between farm A and ranch B, carry no meaning in nature's terms. No coyote or egret reads our deeds; no percolating groundwater stops to ask permission to enter. When farmer A wants his privacy from rancher B we can fairly make use of their mutual boundary. But what A does on his land creates ripples that respect no dust-gathered county tomes. When we grab one thing we find it linked to all else in the universe. In the similar words of poet Gary Snyder, "one cannot walk through a meadow or forest without a ripple of report spreading out from one's passage."\textsuperscript{19} The point is, boundaries are helpful on issues of person versus person, but they have no bearing and should count for little when the issue is how humans relate to the Earth.

Boundaries become even more artificial in the case of individual resources that are conceptually and legally severed from their natural home. In the West, to draw one example, lawmakers are gradually seeing the silliness of dividing surface water from groundwater and allocating them in different ways, as if the hydrologic cycle did not exist.\textsuperscript{20} Standing timber is not a discrete re-

\textsuperscript{17} I do not mean to suggest that property law need not continue to struggle with problems of interpersonal fairness; my belief is that property law does a vastly better job dealing with these issues than it does with issues of land health.

\textsuperscript{18} See, e.g., CHARLES DARWIN, THE ORIGIN OF THE SPECIES (Charles W. Eliot ed., P.F. Collier & Son 1909) (1859) (arguing that evolution occurs by natural selection in which existing forms of life are descendants of pre-existing forms).


\textsuperscript{20} See A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 6.06 (1989) [hereinafter TARLOCK, WATER RIGHTS].
source; it is part of a rich forest ecosystem.21 A prairie wetland is not a mere puddle, awaiting the drainage engineer; it is a vital part in a global network of flood control, water purification, soil protection, and wildlife habitat.22

When a farmer on the Divide drains a pothole he diminishes the habitat and, hence, the population of migratory waterfowl. When the rancher lets her cattle trample the creekbank, the erosion and pollution affect habitats and people downstream. In nature's complex scheme, each effect becomes a new cause. When the wolf is shot, the deer population rises. The deer in turn over-browse, and hillside shrubs are destroyed. Small animals and birds suffer, for they would live in the over-browsed shrubs. The soil suffers, as dying shrubs no longer grasp and hold the fragile ground. Ripple after ripple, we move onward to harms that are traceable, if at all, only by the highly trained. In Aldo Leopold's deservedly remembered words, "[o]ne of the penalties of an ecological education is that one lives alone in a world of wounds."23

In our dealings with nature, even our seemingly modest ones, interconnection is the norm, not discreteness. With the prompting of economists we are prone to think of externalities as unusual in some degree, and identifiable and traceable when they happen.24 The ecologist, however, knows otherwise; she knows that once one part of the land is tugged, the effects always spread wide.

There exists these days a mounting debate on the moral worth of animals and future generations, and the beginnings of a dialogue about moral worth attaching to such intangibles as species and entire natural communities.25 Our property law responds to these

21. This idea is embraced in part in the provisions of the Forest and Rangeland Resources Act that set forth forest management practices. See, e.g., 16 U.S.C. § 1604(g)(3)(B) (1985) (management plans must "provide for diversity of plant and animal communities") and 16 U.S.C. § 1604(g)(3)(F)(v) (1985) (allows even-aged timber cutting techniques only when "such cuts are carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and esthetic resources, and the regeneration of the timber resource.").


23. LEOPOLD, supra note 2, at 197.


25. The literature in this area is vast. See DONALD E. DAVIS, ECOPHILOSOPHY: A FIELD GUIDE TO THE LITERATURE (1989) (providing a good annotated bibliography); RODERICK F. NASH, THE RIGHTS OF NATURE: A HISTORY OF ENVIRONMENTAL ETHICS (1989) (an historical work that considers many of the prominent figures in this area). Many of the leading professional articles today appear in the journal ENVIRONMENTAL ETHICS.
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claims with arrogance and disdain, and it will need a full overhaul to the extent these moral claims one day become truths. But even aside from these claims of moral worth it is easy to see how the health of the land is of indispensable value to humans from a strictly utilitarian perspective. Without a healthy Earth we cannot sustain healthy humans. Even if humans are the sole repositories of moral worth, the rest of nature is nonetheless worthy in that its health is essential.

Once we see worth in non-human life, and sense the innumerable interconnections, it is easy to see the error in assuming that only humans should count. It is an error to suggest, as the law largely does, that how an owner treats a part of nature is his business alone. How a person deals with the land, given the linkages of nature, is public business, the concern of all Creation.

This same problem of recognizing harm existed in early nineteenth-century America with respect to slavery, and a brief glance at the slavery story may prove instructive, if not chilling. In the early slave codes a person who killed a slave owned by another was obligated to pay for the loss. The loss was measured in monetary terms, and when payment was made the injury was remedied. If the slave was too old or sick to work and therefore could not be sold, no loss occurred. The deceased slave had no claim, and the injury to the slave's family and friends was ignored.

The old slave codes contain a warning. The codes operated as they did because slaves were property and property norms dealt then, as now, with the rights of the owner. If we are serious about improving our relations with nature we must stop thinking of nature as our slave. To do this, we must stop thinking of it in tradi-

26. See Freyfogle, Pilgrim Leopold, supra note 5, at 243.
27. See William Goodell, The American Slave Code at 177-96 (1968) (listing and describing laws concerning the killing of slaves). For example, a 1774 North Carolina Act provided that “the killing of a slave, however wanton, cruel, and deliberate, is only punishable, in the first instance, by imprisonment, and paying the value thereof to the Owner...” Id. at 180.
28. Cases are collected in Jacob D. Wheeler, A Practical Treatise on the Law of Slavery 239-49 (Negro Universities Press 1968) (1837) (citing cases denying slaves a civil remedy). See, e.g., Jordan v. Patton, 5 Mart. 615 (La. 1818) (deciding that a defendant who, in a tort action, paid the full value of a slave because the slave had been rendered worthless, became the owner of the slave, with the attendant duty to provide lifetime support). See also Thomas R.R. Cobb, An Inquiry Into the Law of Negro Slavery § 107 (Negro Universities Press 1968) (1858) (“the violation of the person of a female slave, carries with it no other punishment than the damages which the master may recover for the trespass upon his property.”).
tional property terms.

Within the coming decades we need to find ways of living on Earth that are sustainable; ways of interacting with nature that we can continue, over and over. The litmus test must one day be: Is this a practice that our children and grandchildren can continue without diminishing the health and fertility of the Earth? We cannot sustain the consumption of nonrenewable resources, and we cannot continue fouling and degrading our nests. At some point we must say: no more. Health requires diversity, and the extermination of other species with their unique genetic material must one day halt. Urban sprawl must also end, for continued geographic expansion is not sustainable. Some day our bulldozers and chainsaws must cease cutting into wilderness areas and into the habitats of the many species whose health undergirds the health of the whole. These changes, very hastily, are the kinds that will come once land health becomes our goal.

When sustainability becomes our beacon, as one day it must, we shall wonder how we could have so thoroughly embraced a legal system that pays so much attention to the individual owner and the present and so little to the community and the future.

A big part of the law’s error here is its inclination to define a landowner’s rights without regard for the peculiarities of each acre and its natural setting. It is ecologically wrong and conducive to land illness to take an acre on the Divide and transform it into the Blackacre of song and story, thereby according to the owner of this Blackacre the same rights enjoyed by owners of Blackacres everywhere. By calling a tract Blackacre we push the natural peculiarities of a land parcel and the unique ways that the parcel fits into a functioning ecosystem into the category of insignificant. When the law overlooks this richness it becomes easier and seemingly more proper for the owner to do so as well.

This same tendency to shortchange land health pops up in the law’s messages about injuries and remedies. The law typically remedies an injury by ordering the payment of money based on the owner’s financial harm. Once money is paid the remedy is complete and the social fabric is, in theory, adequately mended.

From the perspective of land health, this focus is sadly and painfully incomplete. Many harms do not translate into dollar terms

except by being mangled and miscast. Consider the case of Farmer A out on the Divide who broadcasts his powerful herbicide by airplane. The potent chemical drifts with the wind onto neighbor B’s prairie remnant, destroying hundreds of plants and diminishing animal habitat. Can B show economic harm when his prairie remnant yields no financial return? If payment is made, will it cover diminished market value or, instead, the vastly higher costs of actual restoration? If this higher amount is paid, will B be under an obligation to actually restore the land? If restoration is done, will it involve simply taking plants from elsewhere, thereby diminishing other places? And, lastly, what have we done in the interim about the land’s diminished capacity? These are the questions that we, as the law’s inheritors, need to talk about more deliberately.

If and when lawmakers adopt land health as a vital value they will face many obstacles. Perhaps no obstacle will be greater than our culture’s inclination to believe that, collectively, we have all the facts we need to plot the right course, or that we shall, inevitably and with time, find out what we need to know in order to reverse the degradation.

At times, to be sure, we sense better. But in no setting is our knowledge as incomplete as it is when we talk about the complexities and interactions of nature’s many parts. What we know of the Earth may fill libraries, but it is little more than one grain of sand on the beach. Nature is far greater than our knowledge of it, which means that humans are ignorant of nature and draw faulty conclusions from even the best forms of logic.

In some fashion our legal system will need to come to grips with this ignorance. We cannot fully trace effects; we cannot calculate harm; we do not know how to play Earth doctor and restore full health once we create sickness. In the end we must adopt a stance of greater humility, respect, and awe. We must recognize the inevitability of mistakes and leave room for second chances.\(^3\) We must embrace a wisdom that mingle knowledge with intuition and with an articulated, expansive land ethic.

IV. A TRIOLOGY FROM THE PAST

If we are to get to the bottom of the messages that our legal culture conveys about humans and the land we need to take a brief

\(^3\) The sense of this paragraph owes much to the writings of Wendell Berry, particularly his HOME ECONOMICS 2-5, 54-75 (1987).
look at three larger components of that culture: Property and Privacy, Liberty and Equality, and Rights Talk. Although these components are not, strictly speaking, part of the law, they too collaborate in promoting our assault on the land.

A. Property and Privacy

Our primary sense of private ownership sinks its taproot into the natural law philosophy and political turmoil of the eighteenth century. From this revolutionary field we retain a sense of private property as a bulwark against an officious, overreaching state. In our heritage, property is a place of retreat, an enclave of autonomy and power from which to resist the community's intrusions.

Land took on this role in an era when it provided the principal form of wealth. Baron and yeoman alike could, with land, withdraw from public turmoil and live off the fruits of the soil. Today land is eclipsed by other wealth forms, and few urban condominiums provide a source of independent sustenance. Still, with eyes of days gone by we see property as a shield against the community. This image — of property as enclave, as castle, as isle of autonomy — transcends any particular provisions in the law. It acts through the imagination and plays a quiet, directing role in the subconscious.

In our communal quest to promote land health this image of autonomy offers nothing but trouble. It encourages the irrigator on the Divide to think that what he does on his soil is his business alone. To all of us the image suggests that substantial landowner independence is necessary if our body politic and social fabric are to thrive.

Privacy and autonomy are important values that deserve protection, and we can offer protection through rules like the Fourth Amendment's ban on warrantless searches and seizures. But we can protect against prying eyes and snooping hands without giving landowners the right to disrupt land health. The right to keep others off need not mean, and indeed simply cannot mean much lon-

31. For background on the evolving meaning of property as a feature of a person's autonomy from government control, see, e.g., Richard Schlatter, Private Property: The History of an Idea 151-238 (1951); Francis S. Philbrick, Changing Conceptions of Property in Law, 86 U. Pa. L. Rev. 691 (1938).

32. U.S. Const. amend. IV ("The right of the people to be secure in their persons, houses, papers, and effects against unreasonable searches and seizures, shall not be violated . . . ").
ger, the right to use land in ways that generations to come can only reject. In fairness to one another, in fairness to future generations and in fairness to the Earth itself, the right to degrade cannot be a stick in the owner's bundle of entitlements.

As a community we must learn to separate issues of social privacy from issues of wise land use. Our property can be our sphere of privacy, it can furnish our den of psychological independence, without compromising on the question of sustainable living practices.

B. Liberty and Equality

Closely linked with this inherited image of land as an autonomous enclave is another central message of our legal culture: the message that our legal system's prime aim is to foster liberty and equality among all people. This two-part message also has troubling implications for land health, however valuable it is for other purposes.

Liberty means the freedom to do what we want without interference, especially governmental interference. What message, indeed, is more American? We know that we cannot do everything we want, but we dislike the notion of government limiting our options. What one can do, all should have the legal right to do. Liberty merges with the goal of equality, which principally means not equality of achievement but, rather, equality of opportunity. The law should treat us the same by avoiding unfair distinctions.

In the realm of land ownership, liberty and equality translate into a message that goes something like this: What another landowner may do on his land, I should be able to do on mine. So long as I do not injure other people, I should be free to use my land as I wish. Liberty means government off our backs, which means minimal limitations on exploiting the land.

Liberty and equality are the shining beacons of our legal culture, messages of such power that they help define our very existence. They call forth centuries of struggle against privilege and bias. But these images have also helped lead us along the path of land abuse, for they encourage us to ignore natural contexts. We are inclined to let A use Whiteacre as we have let B use Blackacre, ignoring in the process the parcels' many differences.

In the realm of land-use issues we need to cast the equality equation anew. We must learn to say: A can use Blackacre as we would let B use it. When we vary A and B we focus on equal treatment of people. When we equate Whiteacre and Blackacre, we
play the ecological fool.

Despite the form of our rhetoric, equality is a tool not a goal, a tool that we use only when we like its results. The claim that A and B are equal means, more precisely, that we deliberately ignore some or all of the differences between them when setting some particular policy.\(^3\) When A and B want to talk in the public square, virtually all differences between them are ignored; for this purpose the law treats them equally. When A and B want to vote, their race and sex are irrelevant — they are, in that sense, equal — but we do not also ignore their ages, citizenship, and residency. On these latter points they are, we might say, treated equally but dissimilarly situated in ways that are legally significant.

When we talk about equality in the land-use context we must realize that land parcels are rarely equal; they should, indeed, be presumptively unequal, in ways that really matter.

Like equality, liberty is more tool than goal, useful only when its results are good. We are free so that we can pursue our peculiar versions of the good life. As Alexander Solzhenitsyn asked rhetorically, “Can external freedom for its own sake be the goal of conscious living beings? Or is it only a framework within which other and higher aims can be realized?”\(^4\) The risk of liberty is that, infected with its spirit, we overlook the essential limit — that liberty carries no license to impose significant harm. Harm provides the crux: when does it exist, and what type and level of harm must the community endure in the name of individual growth.

If we are to achieve sustainable land practices we must rein in our ideal of the liberated individual. Liberty does not mean the right to maim and kill fellow humans. Neither does it mean the right to abuse the land, however tied the destruction may be to an expressive and liberated lifestyle. In our formulation of liberty, land abuse must soon rise to the level of people abuse.

C. Rights Talk

This brings us to a third strand of our legal culture that needs reshaping. When we speak of right and wrong, of whether A can or cannot act in some way, we naturally speak in terms of rights.

\(^3\) See Peter Westen, Speaking of Equality (1990) (attempting to understand what equality means).

A has some right and B is under a duty to avoid interfering. A has a privilege to do something on his land and B has no right to interfere; or A has a power to direct that something be done and B is under a liability to obey.  

This discourse arose many years ago, largely to explain how individuals relate to one another and to the community. The words presuppose a context of person against person, a social context of individuals. Party A asserts his rights against B. B responds by denying the claim or by pushing his own rights, and some accommodation is achieved. This is the typical context of claims and counterclaims.

It is dangerous to use this language when a person takes his plow, ax or shovel to the land. It makes little sense for me to stand before a majestic tree and proclaim my “right” to cut it down, for the tree cannot talk back. It makes no sense for me to proclaim to an imagined mass of future generations my “right” to grow crops in a way that poisons the soil and sends it washing downstream. They, too, cannot respond.

We can meaningfully talk among ourselves about duties to the land, to future generations, and to animals. But we must realize that we are charged to represent both sides. For too long the talk has remained one-sided. Landowners have asserted their rights to alter and abuse the land, and the land has suffered mutely. In some subconscious way the issue seems to be between us and the thing itself, and we resent interference from outsiders.

Rights talk was developed for a much different purpose, to describe relationships involving actors who can argue with one another and defend their claims. In fact, it is sometimes difficult to use this language to cover the incompetent, the comatose, the fetus, and others who deviate from the norm. Legal language is strained in these cases; it is strained even more when one party is nature and its components.

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35. See Wesley N. Hohfeld, Some Fundamental Legal Conceptions as Applied in Judicial Reasoning, 23 YALE L.J. 16 (1913) (discussing legal relations and the methods by which they are applied in judicial reasoning to solve legal problems).

36. See Caldwell, supra note 14, at 321-30 (remarking that landowners can assert dominion over nature because nature is powerless to prevent it).

37. We experience the same disorientation and unease when we talk about animal rights. How can an animal have rights when the animal is unaware and cannot enforce them? If an animal has any right it certainly must have the right to live. How then can we kill it for food? See Tom Regan, The Case for Animal Rights (1983) (a leading argument for animal rights).
My sense is that we would be vastly better off discarding rights talk when we set rules about the Earth. The question should be, not whether as landowner I have a right to alter or consume, but whether what I seek to do is right. I will hold rights against other people who are under duties not to interfere. But I should have no rights as against the land or against future generations or animals. The issue here is one of ethics, of sensitivity, and of a stewardship that respects the integrity of the Earth.

V. LISTENING TO THE LAND

There is much that we as lawyers ought to think and do as we reconceive our relationship with the Earth, as we reimagine our links with the soils and the water and with the fellow creatures that inhabit this fertile planet.

In this essay I aim only to sketch the broad outlines of an alternative vision. I am sketchy in part because the details can follow once the general outlines are identified, and it is important to talk generally before moving on. But I am sketchy as well because the outlines themselves are important; to the distant viewer, the nonlawyer who acts more on simple ideas than on detail, the main messages about ownership are the things that count the most. Until these messages are healthy ones, the details mean little.

Somehow we need to grasp the reality that all components of nature are in use at all times. No part of nature exists unattached and unaffected by the rest. Our prairie stream is busy at work providing home for the bass and drink for the deer and red maple. When we divert water for some human use we are not putting it to use; we are altering its use. In urban areas our untapped stream flushes pollution and softens the ill effects of our wastes. When we divert the stream our polluting ills speak out more loudly.

Once we see that all of nature is at work it becomes easier to sense how our every act causes disruption. A stream does not rest quietly, awaiting the long-delayed order to serve; it has always been busy, which means a loss to be assessed when we alter the use. In legal terms there is no such thing as unappropriated water; there is, in ecological truth, no water in nature that is not already applied to a beneficial and reasonable use.\textsuperscript{38}

To this sense of ever-busy nature we need to add a revitalized

\textsuperscript{38} This is the truth that is being embraced, haltingly, in the doctrine of in-stream flow protection. \textit{See, e.g.,} TARLOCK, WATER RIGHTS, supra note 20, at § 5.16(1).
sense that property law involves not just people and abstract ideas, but real things, many of them alive. When property law focuses on the owner against other people we lose all sense of the peculiar thing at issue. Let us regain a sense that we are talking about vital components of the natural fabric of things, not just people.

Who knows when and how we got onto a simplifying track that is so insensitive to the differences among natural things. Who knows how we came to equate the erodible hillside with the prime flat field. Perhaps we were swayed by the forces of industrialization, which encouraged people to think in terms of interchangeable parts and fungible inputs and outputs. Like the laborer on the assembly line, land somehow became an input, faceless and tool-like, and the Earth has suffered greatly as a result. Whatever the causes, it should be clear today that we need a more perceptive vision.

Once we attach weight to land health, once we see how ill health in one place causes ill health elsewhere, we are set to regain the age-old vision of the land as an asset inevitably affected with a public interest. A landowner is little different from the owner of a regulated utility whose business is everyone’s business. Some activities so directly involve communal welfare that they rise to the level of public conduct. Land use must one day become one of these activities. We must one day ask, coldly and free of the shackles of history: Is it solely the owner’s business, or is it in good measure the community’s business as well, when a farm owner employs tillage practices that inexorably destroy the soil?

Another way of phrasing this point is to say that we would do well to expand widely the settings in which we apply our legal concept of public trust. Today the public trust doctrine lives mostly in the realm of water law, where it appears on occasion to give pause to governmental actions that assault our waterways.

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39. See Richard F. Babcock & Duane A. Feurer, Land as a Commodity "Affected with a Public Interest", 52 WASH. L. REV. 289 (1977) (drawing an analogy to regulating land transactions and other fields of public interest regulation). Another excellent piece is Donald W. Large, This Land is Whose Land? Changing Concepts of Land as Property, 1973 WIS. L. REV. 1039 (redefining property rights to include the public interest and therefore allowing more intense government intervention).

40. See, e.g., Block v. Hirsh, 256 U.S. 135, 155 (1921) ("Plainly circumstances may so change in time or so differ in space as to clothe with such an interest what at other times or in other places would be a matter of purely private concern." Justice Holmes, writing for the majority, noted that the development of rental property created a sufficient public interest to require government intervention.).

is in this aged yet fledgling doctrine a vagueness that frightens some and a potential that triggers the hopes and imaginations of others. Our history-bound scholars tell us, rightly, that the doctrine has done little work over the years and that its pedigree is modest. But this is only to say that judges of times past did not see, as we now can, the ways that all resources are linked to all others. They did not see, as we now can, that the erosion of a field and the draining of a pothole create injuries that no owner alone will bear. This is harm done to the home of us all, and it is stating only an obvious ecological truth to say that an "owner" of nature holds it in trust for the rest of Creation.

When we allocate land-use entitlements to individuals we do so with the expectation that their use will bring net communal gain. These use entitlements ought rightly to carry an obligation that the owner be steward, not slave-driver. Entitlements ought to carry the sense that the "owner" is merely today’s custodian of a thing that none of us can claim.

One helpful step would be to put together a declaration of natural interdependence, a pronouncement in our scheme of ownership norms that all components of nature are connected to all other components and that all users of nature are partners and co-fiduciaries.

Our eighteenth-century heritage speaks loudly of the importance of the individual. But we can stretch autonomy too far. Having exalted the worth of the individual human, let us get on with the more natural business of recognizing how we all are parts of a whole. Whether we sense some aim or goal in Creation is perhaps a matter of personal view; what hardly seems personal is the need to recognize links and connections, to confess, as Alexander Pope asserted, that we "[a]ll are parts of one stupendous whole."

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42. See, e.g., Richard J. Lazarus, Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine, 71 IOWA L. REV. 631 (1986) (suggesting that the public trust doctrine rests on legal categories which have become arbitrary and antiquated).

43. See, e.g., DONALD WORSTER, NATURE’S ECONOMY: A HISTORY OF ECOLOGICAL IDEAS 316, 316-38 (1977) (in which interdependence is used as an organizing principle).

This process of becoming sensitive to the peculiarities of place will be vastly aided if, as individuals and lawmakers, we can develop the virtue of being "place people," people who have roots to a particular spot, people who have the knowledge and sensitivity to note evidence of illness and to challenge claims that degradation will bring overall good. People who know a place intimately develop an emotional bond that transcends the personal and the temporary. For a "place person," the special spot "evokes and organizes memories, images, feelings, sentiments, meanings, and the work of imagination." 45

Through our laws we can facilitate and empower those who would develop special ties to the soil. We can, to take an example, show greater respect for the maligned NIMBY groups — the people who shout "not in my backyard" when facing a destructive facility or practice. Their anguished cries can contain a strong dose of self-interest, but it is often an interest based on a special love that treats one acre unlike the next. As we empower neighborhood groups to assert standing in historic preservation bouts, so too in a variety of ways we can give place people the legal power to speak out to protect their physical neighborhood's health. 46 With place people at work everywhere we have our best hope to halt our mundane ravishings.

Place people are most likely to sense that the land is not simply a tool, not simply something to put to use according to our latest economic calculations. They are most likely to sense that a new way of thinking is in order, a way that makes old ways seem barbaric. To quote Canadian philosopher Neil Evernden: "If, a century hence, our descendants have as much difficulty in comprehending resources or benefit-cost analyses or environmental impact assessments as we have in understanding the significance of the philosopher's stone or the holy grail, then and only then will the environmental crisis have ceased to be." 47

The changes in our laws need to be many, and the work will be long and hard. The way to begin, before we start arguing about details, is make clear our larger goal, the goal for lawmakers to

46. I am speaking here, of course, not just of granting standing but of granting substantive rights that the neighbors can enforce.
use and to transmit out to the community. The goal that we need to set above others is the goal of land health, in perpetuity. This means that we must as lawmakers listen to the land. It means that we must, with openness and humility, let the land be our lawgiver.

When farmers and ranchers out on the Divide look at the law's images of ownership they need to see things that are much different than what they now see. They must see images of natural continuity, of interconnectedness, of value in all things in nature; what they must sense, foremost, is that ownership means partnership, it means obligations, and it means restraint.

VI. AN ECOLOGICAL CONSTITUTION

The path to a land-sensitive legal culture is one that may cause headaches for some commentators, particularly those who are prone to want sharp, conservative teeth in the constitutional takings clauses. As we progress down the path to land health, land ownership will come to mean something far different than Blackstone's hypothetical sphere of total domination. Indeed, it is safe to predict that, for those whose image of property builds on Blackstone's base, this new vision of ownership will come cloaked in somber, threatening garb.

Those who embrace the free market may also join the resistance to this new ownership imagery. Free market proponents are prone to favor starkly defined, unchanging property rights that market forces can then allocate to the highest paying user. Property rights are most easily transferred when they appear as fungible, easily shifted units of production. Economists are prone to smile when a water flow here equals a water flow there, and when both are easily transfered at the direction of the highest bidder. For the economist, Blackacre and Whiteacre must be treated alike.

In reality the task that lies ahead in our takings jurisprudence will likely prove more daunting for many of these critics than it

48. WILLIAM BLACKSTONE, 2 COMMENTARIES *1-15.

will for the less-doctrinal Supreme Court. What we mean by property will need to change, and that change, in our laws in general, will be far easier if the constitutional definition of property changes along with it. The Supreme Court’s decisions reflect a rather comfortable inclination to see property in intuitive, common-sense, flexible terms. Except on the issue of physical invasion, about which the Court has a distinct fetish, the Court has bent with social forces and social needs. It has readily trimmed Blackstone’s stark, ownership-as-absolute-dominion image to reflect the new forms of common understanding.

In the years ahead the Court’s task shall be to find a way to think of property as an evolving social institution, as an institution that responds to social needs. This step will not be easy, although a person would need to be historically and culturally blind not to see how ownership norms have differed over time and space. As importantly, the Supreme Court will need to take this step, from inflexible to flexible property, in a fashion that retains the taking clauses as checks on governmental conduct that truly goes too far in frustrating an owner’s expectations.

Over time, as popular understanding grows, more and more of us will think of property rights as things that are context dependent. As this intuition gains ground our common sense of property will shift. Our intuition increasingly will be that the owner of a sensitive wetland holds no power to drain or fill it. This kind of conduct will seem naturally wrong, a nuisance or worse, and a legal ban on draining will merely implement our shared image of that stewardship.

Our courts must not hinder this evolutionary process by grafting on to the Constitution an image of property that hearkens to an earlier era of ecological insensitivity. Property as a social institution has always evolved, and it is right and necessary that we let it do

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50. See Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982) (affirming the traditional rule that a permanent physical occupation of property is a taking even in the case of an occupation of less than one cubic foot).

51. See Laurence H. Tribe, Constitutional Choices 169-74 (1985) (remarking that the United States Supreme Court has voided state statutes that redefined property rights too radically).

52. See Eric T. Freyfogle, Context and Accommodation in Modern Property Law, 41 Stan. L. Rev. 1529 (1989) (demonstrating that water use rights in California are now defined as context dependent).

53. See, e.g., Just v. Marinette County, 201 N.W.2d 761 (Wis. 1972) (upholding an ordinance prohibiting the filling of wetlands adjacent to water).
so. At any given time a community will hold a general sense of what property is all about and what it means to own a thing. It is this general sense that the Constitution should protect, for this is the sense upon which reasonable expectations are based. The Constitution’s task is to stand ready to protect against governmental acts that cut into these reasonable expectations too deeply. It must not, instead, stand as a bar to long-term essential shifts in what it means to own. If the Constitution does erect a costly hurdle, our quest for land health shall be all the more difficult.  

We can hope that conservative economists too will awaken to our communal need to redefine what ownership is all about. Once this redefinition takes place, perhaps we can indeed let the market select the identity of the owner. But the question of what rights any person can own in the land is prior to the question of who should own them. The market may help us find the who, but our ethics and ecological wisdom ought to set the limits on the what. While this shift takes place ownership entitlements will exist in muddied, uncertain form; there will be times when we have little settled sense of what ownership means. But we can easily survive the temporary inefficiency that this muddiness brings. What we cannot survive much longer is a system that fosters such efficient land destruction. In any event, market efficiency is merely a tool that helps carry out social values and needs. Society ought to tell the market what can be bought and sold, not the reverse.  

Takings law, in sum, is not likely to stand as a serious problem absent an unexpected shift by the Court toward a rigid, formalist, outdated view of property. There is, however, one other difficulty that lies ahead, a difficulty that will loom large in the long, challenging road to sustainable living practices.

54. The Court’s recent decision in Keystone Bituminous Coal Assn. v. DeBenedictis, 480 U.S. 470 (1987), perhaps illustrates a willingness by the Court to see that conceptions of property change. In Keystone the Court upheld a restriction on coal mining virtually identical to the one struck down in the celebrated Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922). Although the Court distinguished Mahon, it did so on artificial grounds. The real difference between the cases is that Mahon was decided at a time when the coal mining regulation interfered with the dominant image of property. Keystone was decided later, in an age of greater environmental and social sensitivity; in this new setting, the statute did not conflict with the common sense of what ownership entails.

55. See, e.g., Richard A. Epstein, Takings: Private Property and the Power of Eminent Domain (1985) (arguing that the Constitution should be construed to freeze property rights and create, in essence, a constitutional law of property).
VII. RECONSIDERING FIRST-IN-TIME

In the years ahead we shall, in many settings, come face to face with the inequities of first-in-time as a method of allocating property-use entitlements. This allocation principle has enjoyed wide use over the centuries, both alone and in combination with other allocation criteria. The inequities of first-in-time need to be identified, discussed, and in some fashion mitigated; if they are not, the journey to sustainable living will trigger repeated calls of favoritism and unfair treatment, calls that will stand firm in our path.

When resources are plentiful a first-in-time rule provides a quick and easy mode of allocating use rights among individuals. When resources are scarce, however, those who arrive late are disadvantaged. As John Locke admitted by use of his well-known proviso, a person can fairly claim ownership of a thing that he has mixed with his labor only if similar things are available for all who want to do the same. It is when some people arrive too late that the cries of unfairness begin.

Down the path to sustainable living our society will need to limit severely the ways that much land is used. This will require, inevitably, some method of choosing landowners who can engage in intensive land uses from those who cannot. Somehow we must decide: Which farm owners will be able to develop their lands into residential areas and which will not? Which landowners on a wild lake will be able to build cabins and which will not? A healthy Earth will mean land set aside for wildlife; it will mean widespread examples of healthy natural communities, largely untouched by humans. Which land will be devoted to these purposes and which will not?

This is the first-in-time issue, and it will crop up in the context of all of nature's component parts. Which timber owner will be allowed to cut? Which grassland owner will be allowed to plow or to pump?

If past practice guides us we will allow exploitation by the first


landowners who act. Once a limit is reached — and we are nearly there already — remaining landowners will be too late, even if their lands are similar. But if we drift in this direction, will we have the resolve to resist the cries of unfairness that inevitably will come? Are we willing, that is, to let the race go entirely to the quick-footed and well-funded and then call a total halt? Or will we give in and allow more alteration of land, and then a bit more, and more after that?

By anticipating this problem we can identify ways to mitigate the winner-take-all aspect of a first-in-time rule. Once sustainable living becomes our goal the ability to develop land will no longer be an attribute of land ownership. Landowners who are allowed to develop will be seen as recipients of a special communal privilege. Obligations to share with the unprivileged the economic benefits that come from altering the Earth ought to accompanying this special privilege.

This sharing of benefits can be done in many ways. Development exaction fees can be used with the fees devoted to programs that benefit the community. Pooling mechanisms can be used, not unlike those commonly employed in oil and gas fields. When one landowner is selected to exploit, the fruits ought to be shared with the rest. When possible, burdens can be shared more directly. Each farmer can set aside acres for wildlife so that no one bears a heavy load. All water users can cut back when stream flows are needed for fish and wildlife.

The possibilities are many and the details can be worked out, but only once we come to agree that, in our alteration of the Earth, there is such a thing as too much. There needs to be a limit that we stick to, forever.

VIII. CODA: BELONGING

A bit more than a century ago the Supreme Court offered a comment on what it means to own property within a community: "[A]ll property in this country," the Court intoned, "is held under the implied obligation that the owner's use of it shall not be injuri-

ous to the community. The year the Court spoke, fourteen-year-old Willa Cather explored the ravines and ridges along the Republican River, and she let the stark, haunting beauty of the land sink into her soul. She sensed, not bits and pieces, not resources and assets, but a country enchanted and whole, a place where the people and the land were one. But Cather was a seer, not a farmer, and those who used the land sensed something else, something that they acted upon on the ground and put into effect in their laws.

By now we should know that the community of which we are a part includes the soils, waters, plants, and animals that live with us on Earth. By now we should know that the land does not belong to us; we belong to it. Our charge is to avoid injury to this enlarged community, and if we can go further, to foster its health and beauty.

This implied obligation of owning the land has long existed. Is it not time for us, by speaking and acting, to make that obligation express?

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