ROUND RIVER

From the Journals of Aldo Leopold



Edited by Luna B. Leopold

Illustrated by Charles W. Schwartz

New York · OXFORD UNIVERSITY PRESS · 1953

you cannot love game and hate predators; you cannot conserve the waters and waste the ranges; you cannot build the forest and mine the farm. The land is one organism. Its parts, like our own parts, compete with each other and co-operate with each other. The competitions are as much a part of the inner workings as the co-operations. You can regulate them—cautiously—but not abolish them.



The outstanding scientific discovery of the twentieth century is not television, or radio, but rather the complexity of the land organism. Only those who know the most about it can appreciate how little we know about it. The last word in ignorance is the man who says of an animal or plant: 'What good is it?' If the land mechanism as a whole is good, then every part is good, whether we understand it or not. If the biota, in the course of aeons, has built something we like but do not

understand, then who but a f
less parts? To keep every cog
of intelligent tinkering.

Have we learned this first
serve all the parts of the lan
the scientist does not yet rec

In Germany there is a n
south slope bears the most
American cabinetmakers, w
quality, use Spessart oak. The
better, bears an indifferent s
slopes are part of the same s
aged with equally scrupulous
difference?

Kick up the litter under t
leaves rot almost as fast as t
the needles pile up as a thick
Because in the Middle Ages
a deer forest by a hunting bis
plowed, and cut by settlers,
Wisconsin and Iowa today.
the north slope replanted to
something happened to the
soil. The number of species
tive apparatus of the soil lo
of conservation have not s
required the modern micros
soil science, to discover the
wheels' which determine ha
and land in the Spessart.

American conservation
most part with show pieces

understand, then who but a fool would discard seemingly useless parts? To keep every cog and wheel is the first precaution of intelligent tinkering.

Have we learned this first principle of conservation: to preserve all the parts of the land mechanism? No, because even the scientist does not yet recognize all of them.

In Germany there is a mountain called the Spessart. Its south slope bears the most magnificent oaks in the world. American cabinetmakers, when they want the last word in quality, use Spessart oak. The north slope, which should be the better, bears an indifferent stand of Scotch pine. Why? Both slopes are part of the same state forest; both have been managed with equally scrupulous care for two centuries. Why the difference?

Kick up the litter under the oaks and you will see that the leaves rot almost as fast as they fall. Under the pines, though, the needles pile up as a thick duff; decay is much slower. Why? Because in the Middle Ages the south slope was preserved as a deer forest by a hunting bishop; the north slope was pastured, plowed, and cut by settlers, just as we do with our woodlots in Wisconsin and Iowa today. Only after this period of abuse was the north slope replanted to pines. During this period of abuse something happened to the microscopic flora and fauna of the soil. The number of species was greatly reduced, i.e. the digestive apparatus of the soil lost some of its parts. Two centuries of conservation have not sufficed to restore these losses. It required the modern microscope, and a century of research in soil science, to discover the existence of these 'small cogs and wheels' which determine harmony or disharmony between men and land in the Spessart.

American conservation is, I fear, still concerned for the most part with show pieces. We have not yet learned to think

When we say 'striving,' I think we imply an effort of the mind as well as a disturbance of the emotions. It is inconceivable to me that we can adjust ourselves to the complexities of the land mechanism without an intense curiosity to understand its workings and an habitual personal study of those workings. The urge to comprehend must precede the urge to reform.

When we say 'striving,' we likewise disqualify at least in part the two vehicles which conservation propagandists have most often used: fear and indignation. He who by a lifetime of observation and reflection has learned much about our maladjustments with land is entitled to fear, and would be something less than honest if he were not indignant. But for teaching the fresh mind, these are outmoded tools. They belong to history.

My own gropings come to a dead end when I try to appraise the profit motive. For a full generation the American conservation movement has been substituting the profit motive for the feat motive, yet it has failed to motivate. We can all see profit in conservation practice, but the profit accrues to society rather than to the individual. This, of course, explains the trend, at this moment, to wish the whole job on the government.

When one considers the prodigious achievements of the profit motive in wrecking land, one hesitates to reject it as a vehicle for restoring land. I incline to believe we have overestimated the scope of the profit motive. Is it profitable for the individual to build a beautiful home? To give his children a higher education? No, it is seldom profitable, yet we do both. These are, in fact, ethical and aesthetic premises which underlie the economic system. Once accepted, economic forces tend to align the smaller details of social organization into harmony with them.

No such ethical and aesthetic premise yet exists for the condition of the land these children must live in. Our children

land ethic

CONSERVATION

are our signature to the
the place our money was
in the possession of a g
polluted stream, provide
youngsters to college. W
will fix it.

I think we have here t
vation education must bu
economics and a univer
mechanism. Conservatio

are our signature to the roster of history; our land is merely the place our money was made. There is as yet no social stigma in the possession of a gullied farm, a wrecked forest, or a polluted stream, provided the dividends suffice to send the youngsters to college. Whatever ails the land, the government will fix it.

I think we have here the root of the problem. What conservation education must build is an ethical underpinning for land economics and a universal curiosity to understand the land mechanism. Conservation may then follow.