

# *A Sand County Almanac*

AND

SKETCHES HERE AND THERE

BY *Aldo Leopold*

*Illustrated by* CHARLES W. SCHWARTZ

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#### THE UPSHOT

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#### CONSERVATION ESTHETIC

National Park breathes approximately the same air, and experiences the same contrast with Monday-at-the-office, as does the first. One might even believe that the gregarious assault on the outdoors enhances the contrast. We may say, then, that the fresh-air and change-of-scene component is like the photographic trophy—it withstands mass-use without damage.

We come now to another component: the perception of the natural processes by which the land and the living things upon it have achieved their characteristic forms (evolution) and by which they maintain their existence (ecology). That thing called 'nature study,' despite the shiver it brings to the spines of the elect, constitutes the first embryonic groping of the mass-mind toward perception.

The outstanding characteristic of perception is that it entails no consumption and no dilution of any resource. The swoop of a hawk, for example, is perceived by one as the drama of evolution. To another it is only a threat to the full frying-pan. The drama may thrill a hundred successive witnesses; the threat only one—for he responds with a shotgun.

To promote perception is the only truly creative part of recreational engineering.

This fact is important, and its potential power for bettering 'the good life' only dimly understood. When Daniel Boone first entered into the forests and prairies of 'the dark and bloody ground,' he reduced to his possession the pure essence of 'outdoor America.' He didn't call it that, but what he found is the thing we now seek, and we here deal with things, not names.

Recreation, however, is not the outdoors, but our reaction to it. Daniel Boone's reaction depended not only on the

perception  
good point

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quality of what he saw, but on the quality of the mental eye with which he saw it. Ecological science has wrought a change in the mental eye. It has disclosed origins and functions for what to Boone were only facts. It has disclosed mechanisms for what to Boone were only attributes. We have no yardstick to measure this change, but we may safely say that, as compared with the competent ecologist of the present day, Boone saw only the surface of things. The incredible intricacies of the plant and animal community—the intrinsic beauty of the organism called America, then in the full bloom of her maidenhood—were as invisible and incomprehensible to Daniel Boone as they are today to Mr. Babbitt. The only true development in American recreational resources is the development of the perceptive faculty in Americans. All of the other acts we grace by that name are, at best, attempts to retard or mask the process of dilution.

Let no man jump to the conclusion that Babbitt must take his Ph.D. in ecology before he can 'see' his country. On the contrary, the Ph.D. may become as callous as an undertaker to the mysteries at which he officiates. Like all real treasures of the mind, perception can be split into infinitely small fractions without losing its quality. The weeds in a city lot convey the same lesson as the redwoods; the farmer may see in his cow-pasture what may not be vouchsafed to the scientist adventuring in the South Seas. Perception, in short, cannot be purchased with either learned degrees or dollars; it grows at home as well as abroad, and he who has a little may use it to as good advantage as he who has much. As a search for perception, the recreational stampede is footless and unnecessary.

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There is, lastly, a fifth. It is unknown to the ordinary man with his vote rather than with his perception only when some art or some person of perception is reserved for landholders and land administrators with the tourist who buys together; so also the sportsman, the underling, to be his essays to substitute partial lands, is unwittingly a large share of what it is and game managers must be paid for, our job as hunters.

That a sense of husbandry may be quite as realized to some extent as a sense of sportsmanship. American sportsmen are a game-cropping of the forests, and in some respects they are entirely the sense of husbandry in the landholder in the present. It is impossible to bait the farmer with the forest, or with game reserves, we are merely admitting the wild are as yet unexplored.

Scientists have an eye for what they mean is that

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repeats the evolutionary history of the race. This is true of mental as well as physical things. The trophy-hunter is the caveman reborn. Trophy-hunting is the prerogative of youth, racial or individual, and nothing to apologize for.

The disquieting thing in the modern picture is the trophy-hunter who never grows up, in whom the capacity for isolation, perception, and husbandry is undeveloped, or perhaps lost. He is the motorized ant who swarms the continents before learning to see his own back yard, who consumes but never creates outdoor satisfactions. For him the recreational engineer dilutes the wilderness and artificializes its trophies in the fond belief that he is rendering a public service.

The trophy-recreationist has peculiarities that contribute in subtle ways to his own undoing. To enjoy he must possess, invade, appropriate. Hence the wilderness that he cannot personally see has no value to him. Hence the universal assumption that an unused hinterland is rendering no service to society. To those devoid of imagination, a blank place on the map is a useless waste; to others, the most valuable part. (Is my share in Alaska worthless to me because I shall never go there? Do I need a road to show me the arctic prairies, the goose pastures of the Yukon, the Kodiak bear, the sheep meadows behind McKinley?)

It would appear, in short, that the rudimentary grades of outdoor recreation consume their resource-base; the higher grades, at least to a degree, create their own satisfactions with little or no attrition of land or life. It is the expansion of transport without a corresponding growth of perception that threatens us with qualitative bankruptcy of the recreational process. Recreational development is a job not of

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## Wildlife

The culture of primitive life. Thus the plains are largely determined by and religion.

In civilized peoples the culture nevertheless discuss the value of the

No one can weigh in no time trying to do so. I present of thinking people sports, customs, and wild things. I venture three kinds.

First there is value in our distinctive national character. It creates awareness of history in its best sense. For call this, in our case the boy scout has tanned. Booneing in the wilderness. Enacting American history. Prepared to face the future. Again: a farmer boy



building roads into lovely country, but of building receptivity into the still unlvely human mind.

### *Wildlife in American Culture*

The culture of primitive peoples is often based on wildlife. Thus the plains Indian not only ate buffalo, but buffalo largely determined his architecture, dress, language, arts, and religion.

In civilized peoples the cultural base shifts elsewhere, but the culture nevertheless retains part of its wild roots. I here discuss the value of this wild rootage.

No one can weigh or measure culture, hence I shall waste no time trying to do so. Suffice it to say that by common consent of thinking people, there are cultural values in the sports, customs, and experiences that renew contacts with wild things. I venture the opinion that these values are of three kinds.

First there is value in any experience that reminds us of our distinctive national origins and evolution, i.e. that stimulates awareness of history. Such awareness is 'nationalism' in its best sense. For lack of any other short name, I shall call this, in our case, the 'split-rail value.' For example: a boy scout has tanned a coonskin cap, and goes Daniel-Booneing in the willow thicket below the tracks. He is reenacting American history. He is, to that extent, culturally prepared to face the dark and bloody realities of the present. Again: a farmer boy arrives in the schoolroom reeking of

*wilderness related to human cultural development*

THE UPSHOT

### Wilderness

Wilderness is the raw material out of which man has hammered the artifact called civilization.

Wilderness was never a homogeneous raw material. It was very diverse, and the resulting artifacts are very diverse. These differences in the end-product are known as cultures. The rich diversity of the world's cultures reflects a corresponding diversity in the wilds that gave them birth.

For the first time in the history of the human species, two changes are now impending. One is the exhaustion of wilderness in the more habitable portions of the globe. The other is the world-wide hybridization of cultures through modern transport and industrialization. Neither can be prevented, and perhaps should not be, but the question arises whether, by some slight amelioration of the impending changes, certain values can be preserved that would otherwise be lost.

To the laborer in the sweat of his labor, the raw stuff on his anvil is an adversary to be conquered. So was wilderness an adversary to the pioneer.

But to the laborer in repose, able for the moment to cast a philosophical eye on his world, that same raw stuff is something to be loved and cherished, because it gives definition and meaning to his life. This is a plea for the preservation of some tag-ends of wilderness, as museum pieces, for the edification of those who may one day wish to see, feel, or study the origins of their cultural inheritance.

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*Continued next page*

WILDERNESS

The Remnant

Many of the diverse wildernesses of America are all merged America are all program the unit areas size and in degree of wilderness.

No living man will see a sea of prairie flowers. We shall do well to find the prairie plants can be hundred such plants, many of them are quite unknown domain.

But the short-grass prairie the horizon under the be a few spots of 10,000-acre sheep, cattle, and dry-farm commemorating on the scene of their mighty heral national prairie reservation.

Of the coastal prairie one in Texas, but oil wells are closing in, armed to the It is last call.

No living man will see Lake States, or the flatwoods giant hardwoods; of these have to suffice. But there hemlock of thousand-acre Appalachian hardwoods, cypress swamp, and of A



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## THE UPSHOT

teract mass-production. The value of recreation is not a matter of ciphers. Recreation is valuable in proportion to the intensity of its experiences, and to the degree to which it *differs from* and *contrasts with* workaday life. By these criteria, mechanized outings are at best a milk-and-water affair.

Mechanized recreation already has seized nine-tenths of the woods and mountains; a decent respect for minorities should dedicate the other tenth to wilderness.

## Wilderness for Science

The most important characteristic of an organism is that capacity for internal self-renewal known as health.

There are two organisms whose processes of self-renewal have been subjected to human interference and control. One of these is man himself (medicine and public health). The other is land (agriculture and conservation).

The effort to control the health of land has not been very successful. It is now generally understood that when soil loses fertility, or washes away faster than it forms, and when water systems exhibit abnormal floods and shortages, the land is sick.

Other derangements are known as facts, but are not yet thought of as symptoms of land sickness. The disappearance of plants and animal species without visible cause, despite efforts to protect them, and the irruption of others as pests despite efforts to control them, must, in the absence of simpler explanations, be regarded as symptoms of sickness in the land organism. Both are occurring too frequently to be dismissed as normal evolutionary events.

The status of thought on these ailments of the land is

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## WILDERNESS

reflected in the fact that prevailing local. Thus v fertilizer, or at best altering considering the fact that built the soil to begin with its maintenance. It was that good tobacco crops on the preconditioning of not occur to us that such may have wide prevalence

When prairie dogs, ground pest levels we poison the animal to find the cause animal troubles must have tific evidence points to munity as the real seat of tions of this clue are being

Many forest plantations trees on soil which originate trees. Why? Thinking for ably lies not in the tree, and that it may take more it took to destroy it.

Many conservation treaties Flood-control dams have Check dams and terraces Refuges and hatcheries to fish do not explain why the

In general, the trend of land, just as in the human one organ and the cause of call conservation are, to a

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#### THE UPSHOT

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#### THE LAND ETHIC

society. The Golden Rule ties to integrate the individual to society; democracy to integrate social organization to the individual.

There is as yet no ethic dealing with man's relation to land and to the animals' and plants which grow upon it. Land, like Odysseus' slave-girls, is still property. The land-relation is still strictly economic, entailing privileges but not obligations.

The extension of ethics to this third element in human environment is, if I read the evidence correctly, an evolutionary possibility and an ecological necessity. It is the third step in a sequence. The first two have already been taken. Individual thinkers since the days of Ezekiel and Isaiah have asserted that the despoliation of land is not only inexpedient but wrong. Society, however, has not yet affirmed their belief. I regard the present conservation movement as the embryo of such an affirmation.

An ethic may be regarded as a mode of guidance for meeting ecological situations so new or intricate, or involving such deferred reactions, that the path of social expediency is not discernible to the average individual. Animal instincts are modes of guidance for the individual in meeting such situations. Ethics are possibly a kind of community instinct in-the-making.

#### The Community Concept

All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in that community, but his ethics prompt him also to

*Land ethic*

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co-operate (perhaps in order that there may be a place to compete for).

The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.

This sounds simple: do we not already sing our love for and obligation to the land of the free and the home of the brave? Yes, but just what and whom do we love? Certainly not the soil, which we are sending helter-skelter downriver. Certainly not the waters, which we assume have no function except to turn turbines, float barges, and carry off sewage. Certainly not the plants, of which we exterminate whole communities without batting an eye. Certainly not the animals, of which we have already extirpated many of the largest and most beautiful species. A land ethic of course cannot prevent the alteration, management, and use of these 'resources,' but it does affirm their right to continued existence, and, at least in spots, their continued existence in a natural state.

In short, a land ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such.

In human history, we have learned (I hope) that the conqueror role is eventually self-defeating. Why? Because it is implicit in such a role that the conqueror knows, *ex cathedra*, just what makes the community clock tick, and just what and who is valuable, and what and who is worthless, in community life. It always turns out that he knows neither, and this is why his conquests eventually defeat themselves.

In the biotic community, a parallel situation exists. Abra-

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#### THE UPSHOT

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#### THE LAND ETHIC

The ecological fundamentals of agriculture are just as poorly known to the public as in other fields of land-use. For example, few educated people realize that the marvelous advances in technique made during recent decades are improvements in the pump, rather than the well. Acre for acre, they have barely sufficed to offset the sinking level of fertility.

In all of these cleavages, we see repeated the same basic paradoxes: man the conqueror *versus* man the biotic citizen; science the sharpener of his sword *versus* science the search-light on his universe; land the slave and servant *versus* land the collective organism. Robinson's injunction to Tristram may well be applied, at this juncture, to *Homo sapiens* as a species in geological time:

Whether you will or not  
You are a King, Tristram, for you are one  
Of the time-tested few that leave the world,  
When they are gone, not the same place it was.  
Mark what you leave.

#### The Outlook

It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its value. By value, I of course mean something far broader than mere economic value; I mean value in the philosophical sense.

Perhaps the most serious obstacle impeding the evolution of a land ethic is the fact that our educational and economic system is headed away from, rather than toward, an intense consciousness of land. Your true modern is separated