Introduction

A Sound County Almanac, and Sketches Here and There is a book that is greater than itself and about more than it seems. It is elegantly compressed, stuffed with parables, and bubbling over with allusion. In more ways than one, it is 'biblical'. Like most sacred texts, it was constructed and canonized from a larger corpus of writings. Like all classics, it is a miracle that it exists.

A week after the manuscript was accepted for publication in April 1948, Aldo Leopold died of a heart attack, fighting a grass fire on a neighbour's land. His son Luna, working with other family members and some of Leopold's former students, lightly edited it for publication. They rearranged and added material, and under pressure from the publisher changed the title from *Great Possessions* to *A Sand County Almanac, and Sketches Here and There*. In the seventy years since it was published, phrases such as 'thinking like a mountain' and 'fierce green fire' have become ubiquitous in environmental discourse. The 'land ethic' is the idea most closely associated with the book. It is encapsulated in the following dictum:

> A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise. (p. 173)

These words have become a touchstone for many environmentalists, yet there is little agreement about what they mean or how to act on them.

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Born in Burlington, Iowa, in 1887, Aldo Leopold was a child of the Midwest. A master of English prose, he grew up in a German-speaking household, the grandson of adventurous immigrants of distant noble lineage. He was raised in privilege, the son of a manufacturer who was an avid hunter with a strong sense of ethics, the favoured child of a refined mother who had travelled in Europe and attended finishing school in Boston. Leopold was at the top of his class in the Burlington public schools, but for his last year and a half of high school he travelled East to attend the all-male, all-white Lawrenceville School, near Princeton, New Jersey. From there it was a short step to Yale.

A Sand County Almanac is a work of natural history that expresses deep insights into the human condition, but it is not the work of a philosopher or an ivory-tower thinker. Leopold was a practical man whose primary academic qualification was a Master's degree in Forestry. After graduation, he worked for fourteen years in the newly founded US Forest Service in the southwestern United States, leaving to become Secretary of the Albuquerque Chamber of Commerce in New Mexico, a position he held for only one year. He then returned to the Midwest, taking a position with the US Forest Products Laboratory in Madison, Wisconsin. After four years at the lab, five years as a consultant to the Sporting Arms and Ammunition Manufacturers' Institute, and a brief period of unemployment, he took up a newly created professorship in the 'ag school' of the University of Wisconsin, where he spent the last fifteen years of his life.

Although his university education was in applied sciences, Leopold was broadly knowledgeable in the liberal arts. When he graduated from high school in 1905, fewer than 10 per cent of Americans were high-school graduates. The high-school curriculum at that time compared favourably with the general education provided by most colleges today. Throughout his life, Leopold continued to read widely. His commonplace books contain references to Cervantes, Cicero and Milton, among others. Reading aloud was a frequent evening entertainment for Aldo, his wife Estella and their five children. In his professional life, Leopold was a prodigious reader of and contributor

to scientific publications. He wrote more than 300 articles, papers, newsletters and reports, as well as the founding textbook in the new field of game (later to become wildlife) management.

What was most extraordinary about Leopold was not his 'book learning' but his unusual powers of observation and his insatiable curiosity about the natural world. From early childhood he would go for long walks, methodically recording his observations of plants and animals. From Lawrenceville, where he would go for miles on his 'tramps' whatever the season and weather, he wrote to his parents that 'I am now acquainted with 274 species of birds.'*

Leopold's keen senses and sensibility are at the centre of *A Sand County Almanac*. He introduces us to horned owls and geese who get up too early (p. 45), the Silphium that 'disappear[s] from grazed areas' (p. 37), and the ghostly traces of subsistence farmers who have abandoned their worn-out land. Much of the book's power rests on the elegance of Leopold's prose in describing what he sees, explaining the processes of nature that give rise to it, and reflecting on his observations and experiences. Leopold saw himself in the tradition of those who wrote about 'the drama of wild things' – Thoreau, Muir, Burroughs, and others† – and he was generous in his praise of both predecessors and contemporaries.

Yet this is not your grandparents' nature book. The eccentricity begins with the title: there is no county in Wisconsin that is named 'Sand County'. 'Sand County' in the title of *Sand County Almanac* refers to the geological composition of a region: there are several counties in central and western Wisconsin that are made up of sandy, flat land that largely took shape at the end of the last ice age, about 17,000 years ago. In one of these 'sand counties' Leopold bought a foreclosed farm on a floodplain that had been worked until the soil was exhausted. He and his family devoted themselves to restoring the land and rebuilding

* Quoted in Curt Meine, *Aldo Leopold: His Life and Work* (University of Wisconsin Press, 1988), p. 36.

† Quoted in J. Baird Callicott (ed.), *Companion to 'A Sand County Almanac': Interpretive and Critical Essays* (University of Wisconsin Press, 1987), p. 287.

an abandoned chicken coop (which came to be known as 'the Shack') that they used as a weekend house.

Also unusual is the book's tri-partite structure. The first part encompasses twenty-two essays divided into twelve sections, one for each month of the year, each section containing one to four essays. This part of the book is primarily keyed to Leopold's observations of and reflections on seasonal changes at the Shack.* The second part of the book is entitled 'Sketches Here and There' and is composed of fifteen essays divided into six sections, each encompassing a geographical area, each of which contains one to five essays. The final part of the book is composed of four essays and entitled 'The Upshot'. It is in this part of the book that commentators find the most explicit statement of Leopold's conservation philosophy. The juxtaposition of the three parts is jagged, though pleasingly so, in some ways almost post-modernist. The book unfolds from smaller to larger scales, the essays bound together by threads of intimacy between the writer, the reader and the 'community of the land'.

Knopf approached Leopold in 1941 about publishing 'a personal book recounting adventures in the field . . . [with] room for the author's opinions on ecology and conservation'.† In 1944, after reviewing an early draft of the manuscript, a Knopf editor wrote that what they wanted was 'a book of purely nature observations, with less emphasis on the ecological ideas'.‡ In their final letter to Leopold in 1947, a Knopf editor wrote that the 'book is far from being satisfactorily organized . . .', that 'the philosophical reflections . . . are less fresh, and . . . one reader finds sometimes "fatuous",' and that '[t]he ecological argument everyone finds unconvincing'.§ Ironically, what Knopf found least attractive about the book are the

* The Shack is actually located in Sauk County, and Leopold planned to call this part of the book, 'A Sauk County Almanac', but the title was changed when the book's title was changed to *A Sand County Almanac*.

† Quoted in Dennis Ribbens, 'The Making of *A Sand County Almanac*', in Callicott (ed.), *Companion*, p. 92.

‡ Quoted in ibid., p. 99.

§ Quoted in ibid., p. 102.

features that distinguish it from most nature books, and help make *A Sand County Almanac* a classic.

When the book was published in 1949 it was widely and positively reviewed in newspapers and popular journals. Some reviewers really got the book. The *New York Times* reviewer wrote that 'This book looks as harmless as a toy glass pistol filled with colored candy. It turns out to be a .45 automatic fully loaded.'*

The initial sales were modest but respectable. The first edition sold about 20,000 copies. Subsequently, the publishing landscape changed radically with the rise of the modern environmental movement. Rachel Carson's 1962 book, *Silent Spring*, was immediately an international bestseller. In 1966 Oxford brought out a revised edition of *A Sand County Almanac* that included eight additional essays that had been published in a posthumous work edited by Aldo's son Luna.† In 1970, the year of the first Earth Day, the commercial publishing house Ballantine published a paperback version of the 1966 Oxford edition, and sales went through the roof. More than two million copies of various editions of *A Sand County Almanac* have now been printed in fourteen languages.

Leopold had a ready audience when the book was initially published. He was a major figure in the development of professional forestry, ecology and wildlife management in the United States and the author of a widely used textbook, and he had served as the president of several professional organizations, including the Ecological Society of America. Many of his students (as well as his children) went on to have distinguished careers in science. He advised government agencies and committees, and even served a tumultuous term on the Wisconsin Conservation Commission. He was a well-known conservation advocate, and friends with many in the conservation community. He helped to found The Wilderness Society, an organization that today

* Hal Borland, 'The Land is Good', *New York Times*, 16 July 1950.
† Luna B. Leopold (ed.), *Round River: From the Journals of Aldo Leopold* (Oxford University Press, 1953).

has more than one million members. As early as the 1920s he was recognized as an important intellectual force in the conservation community.

Like all of us, he was a person of his times. In recent years, like other 'founding fathers' of environmentalism, he has come under attack for his attitudes towards women and people of non-northern European ancestry.* As a young man he was arrogant – hardly surprising for a Yale graduate from a privileged family. Yet, throughout his life, he was remarkably open and responsive to new experiences and knowledge. He became increasingly humble, expressing himself in more measured and less categorical ways, and changing his mind about some important issues. Not only would Leopold today not hold all of the views that he held when he was writing, but he himself says as much. One of the major points of 'The Land Ethic', especially the section entitled 'The Ethical Sequence', is that 'nothing so important as an ethic is ever "written" . . . it evolve[s] in the minds of a thinking community.' (p. 173) It would also be a mistake to assume that Leopold's views and attitudes were the same as those of his collaborators or friends. He was quite willing to stand in a minority of one, whether in his conservation philosophy or in his votes on the Wisconsin Conservation Commission. Leopold was not part of anyone's mob. Silence, from Leopold, does not always mean assent.

Leopold is sometimes dismissed or undervalued because he is regarded as an American regionalist thinker, whose work is not relevant to a world in which global climate change has become our signature environmental issue. Google n-gram data seems to suggest that this concern may have had an effect on the currency of his thought. The phrases most closely associated with Leopold, 'the land ethic' and 'thinking like a mountain', occur with increasing frequency until the late 1990s, when their incidence declines as the environmental focus shifts from local or

* See, for example, Miles Powell's *Vanishing America* (2016). While this is not the place to fully evaluate these critiques it should be said that they are often anachronistic and tendentious; in any case, they stick less to Leopold than to some of his predecessors and contemporaries.

regional problems to climate change and other global issues. Indeed, Leopold's research sites were in the continental United States, and his essays are mostly set in the American Midwest, apart from for a few set in the Southwest, Canada or northern Mexico. Except for frequent trips to Canada, Leopold left the United States only three times: twice for hunting trips to Mexico and once on a research trip to Germany. Stylistically, Leopold's writing sometimes embodies vocabulary and constructions that seem provincial or dated, and he quotes or echoes American writers and poets who are not much read today, even in the United States (for example, William Cullen Bryant).

Despite these superficial features, Leopold displays a profound grasp of the importance of both deep time and global interconnectedness. For example, he writes in his essay 'Wilderness':

> 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. (p. 144)

One of the paradoxes of *A Sand County Almanac* is that it is a distinctively American book that expresses the moment of modernity in which it was written, while anticipating the epoch that was then taking shape, the one that has come to be called 'the Anthropocene'.*

This brings us to the central question: what kind of a book is *A Sand County Almanac* and what is Leopold trying to accomplish with it? To foreshadow my answer, this is a book

* For the idea of the Anthropocene, see for example, Dale Jamieson and Bonnie Nadzam, *Love in the Anthropocene* (OR Books, 2015); for a systematic attempt to apply Leopold's ideas to global environmental challenges, see J. Baird Callicott, *Thinking Like a Planet: The Land Ethic and the Earth Ethic* (Oxford University Press, 2013).

in which the most important paradoxes and antinomies are not resolved. It is the work of a moralist, not of a philosopher – and it is from this that much of its power derives.*

Leopold was not in the business of constructing a philosophical theory intended to be true, general and coherent; rather, informed by science, he identified ethical challenges that were invisible to most people of his day (and probably to ours), characterized them in creative ways, speculated about how we could and should respond to them, mourned for what we were losing, and showed how we might live in the face of these challenges and losses. In a letter written only weeks before he died, Leopold wrote that he lacked 'a completely logical philosophy all thought out, in fact on the contrary, I am deeply disturbed and do not myself know the answer to the conflicting needs with which we are faced'.† If one did want to put a philosophical gloss on this, one would say that Leopold's work was more about identifying antinomies than reconciling them.‡

One such antinomy concerns the role and nature of science.

* Despite the tradition of reading Leopold as a philosopher, he does not self-identify as such and rarely uses the word (and its cognates). And when he does, it is usually not very clear what he means by it. In an early paper he referred to 'the Russian philosopher Ouspensky' (Aldo Leopold, *A Sand County Almanac and Other Writings on Ecology and Conservation*, ed. Curt Meine (New American Library, 2013) p. 234), but Ouspensky was in fact an esoteric writer and teacher whom philosophers do not recognize as one of their own. The only philosophy book that Leopold mentions in his published work by title (also in early writing) is José Ortega y Gasset's *The Revolt of the Masses* (Leopold, *A Sand County Almanac and Other Writings*, pp. 317, 338). What is most revealing is that Leopold never even mentions the most famous philosopher of his time, John Dewey, who was born before Leopold, died after him, and wrote on topics that would have been of interest to him. The closest Leopold came to Dewey (or indeed to any philosopher) was when Horace Fries of the University of Wisconsin Philosophy Department wrote to Leopold, asking him to contribute a conservation platform for a new political party that was organizing under the auspices of A. Philips Randolph and John Dewey.

† As quoted in Julianne Lutz Warren, *Aldo Leopold's Legacy: Rediscovering the Author of 'A Sand County Almanac'* (Island Press, 2016), p. 264.

‡ Although he does not use this language, a similar point is made by Peter A. Fritzell, 'The Conflicts of Ecological Conscience', in Callicott (ed.), *Companion*, pp. 128–53.

All of Leopold's professional training was in the sciences, and he maintained a scientific attitude in almost all corners of life, keeping precise records regarding the plants and animals he observed, and even banding birds at the Shack. Yet he often expressed his dissatisfaction with science, at least as it was normally practised. In the 'Song of the Gavilan' he writes that

> There are men charged with the duty of examining the construction of the plants, animals, and soils which are the instruments of the great orchestra. These men are called professors. Each selects one instrument and spends his life taking it apart . . . This process of dismemberment is called research . . . A professor may pluck the strings of his own instrument, but never that of another, and if he listens for music he must never admit it to his fellows or to his students. For all are restrained by the iron-bound taboo which decrees that the construction of instruments is the domain of science, while the detection of harmony is the domain of poets. Professors serve science and science serves progress. It serves progress so well that many of the more intricate instruments are stepped upon and broken in the rush to spread progress to all backward lands. One by one the parts are thus stricken from the song of songs. If the professor is able to classify each instrument before it is broken, he is well content. (pp. 113–14)

Despite this withering critique, Leopold continued to count, measure and hypothesize, and to train his students in standard scientific methodologies, all the while writing his essays.

A similar double-mindedness comes out in his attitudes towards animals. In the first sentence of the first chapter of his textbook on game management, he defines game management as 'the art of making land produce sustained annual crops of wild game for recreational use'.* Animals are seen as a population or species-level resource, and Leopold himself took enormous delight throughout his life in 'harvesting' this 'resource'. Indeed, in his journals he wrote about his hunting experiences

* Aldo Leopold, *Game Management* (University of Wisconsin Press, 1986), p. 3.

in a way that led Rachel Carson to say that he was 'a completely brutal man'.* In one of the passages that particularly outraged Carson, Leopold wrote:

> Coming back a snowshoe rabbit hopped across the trail and stopped in the alders about 25 feet distant. We all popped at him with our slingshots. At the second shot I hit him behind the ear with a marble and knocked him cold. It was such a funny performance to kill a rabbit with a rubber gun that we all roared with laughter.†

Yet, on other occasions, Leopold displayed remarkable empathy with all kinds of individual animals, both wild and domestic, from mice to geese, including his dogs Gus and Flick and his horse Polly. The very first essay of *A Sand County Almanac* ('January Thaw') is centered on deducing the 'state of mind' of a skunk (p. 3). Along the way, Leopold attributes sophisticated teleological states to a meadow mouse and a rough-legged hawk (pp. 3–4). Similarly, elsewhere he reflects on the death of a cow who 'had craned her neck . . . as if for one last look up into the cruel cliffs of Blue River'.‡ Best known of all is his description of 'a fierce green fire dying' in the eyes of a wolf that he has just shot, in which he sees 'something new to me [. . .] – something known only to her and to the mountain' (p. 98). Here, he is writing in 1944, describing an incident that occurred in 1909. So although Leopold suggests that this event brought about an immediate change in outlook, the evidence suggests that, while the incident affected him deeply, his change in outlook was neither immediate nor complete.§ Leopold's ambivalence about wolves lingered for some time.

* Rachel Carson, *Silent Spring and Other Writings on the Environment*, ed. Sandra Steingraber (Library of America, 2018), p. 327.
† Leopold, *A Sand County Almanac and Other Writings,* p. 617. This is from a journal entry from 1925 that was posthumously published.
‡ Quoted in Meine, *Aldo Leopold*, p. 192.
§ See Lance Richardson, 'Thinking Like a Mountain', *Paris Review*, 30 July, 2015, https://www.theparisreview.org/blog/2015/07/30/thinking-like-a-mountain/