

## **ALDO LEOPOLD AND “THE LAND ETHIC”**

*In: The Forest Protection or Custodial Management Era, 1910-1933*

Rand Aldo Leopold was born on January 11, 1887, in Burlington, Iowa. Aldo—he never used his first name—was the oldest of four children. He loved to hunt, fish, and explore the bluffs, forests, marshes, lakes, and fields along the nearby Mississippi River. His father, Carl Leopold, taught Aldo different ways to see nature firsthand. Aldo’s love of the out-of-doors did not sit well with his grades during the second part of his high school years that he spent at the Lawrenceville Preparatory School near Princeton, New Jersey. Writing his mother, Clara, in 1904, Aldo mentioned that “I have flunked Geometry...” However, he did finish prep school and went on to attend Sheffield Scientific School at Yale in New Haven, Connecticut, the following year. In 1906, Leopold began his forestry course work at the Yale School of Forestry, which had been founded by a grant from James Pinchot. Leopold received his B.S. degree in 1908 from the Sheffield School and then graduated in 1909 with a masters of forestry.

Soon after graduation he joined the Forest Service and was assigned as a forest assistant to the new Southwestern District (now region). A month later, he was in charge of a timber reconnaissance crew on the Apache National Forest in the Arizona territory when he saw “a fierce green fire” in the eyes of a dying wolf. He never forgot that haunting look and it affected his thoughts for the rest of his life. By 1911, Leopold had been promoted to deputy forest supervisor and, a year later, he was promoted to Supervisor of the Carson National Forest in the New Mexico Territory. In 1912, Aldo married Estella Bergere from Santa Fe, New Mexico (they would have five children together—Starker, Luna, Nina, Carl, and Estella). In 1913, he almost died of an attack of acute nephritis. It was during his almost 17-month recovery that he wrote about setting aside remote areas for special protection based on wilderness as part of the national heritage and the importance of studying nature in a pristine setting.

In 1914, Leopold was assigned to the Office of Grazing in the Forest Service Southwestern District Office (D-3) in Albuquerque, New Mexico. While working on recreation, fish and game, and publicity for the district (Arizona and New Mexico) less than a year later, he wrote a report recommending that game refuges be established in the district and, then, a Game and Fish Handbook—the first such direction in the Forest Service. Leopold’s growing concern about studying nature in natural, undisturbed settings arose through his exposure to the new science of ecology. (Ecology as an area of academic study was formed in 1915 when the Ecological Society of America was founded.) He began his life’s work on wildlife management issues, including game refuges, law enforcement, and predator control, as well as founding a number of big game protective associations in New Mexico and Arizona. Because of these interests, he won the W.T. Hornaday’s Permanent Wildlife Protection Fund’s Gold Medal in 1917.

In 1918, Leopold took a leave of absence from the Forest Service and served as the Secretary of the Albuquerque Chamber of Commerce. He returned to the Forest Service the next year as Assistant District Forester for Operations in the Southwestern Region. While in this role, Leopold developed new and efficient procedures for handling personnel matters, fire-control methods, and forest inspection procedures over some 20 million acres of national forest land. He made a number of important contributions to the soil erosion problems in Southwestern watersheds.

Concerned with the rapid pace of road expansion after World War I, Leopold recommended that roads and use permits be excluded on the Gila River headwaters on the Gila National Forest in 1922. In the early 1920's, he was responsible for laying the groundwork for the Gila Wilderness. Established in 1924 as a 500,000 acre wilderness area, the Gila Wilderness was the first administrative wilderness in the National Forest System. Although his plan was approved, it was only a local policy, not national. Leopold left the Southwest in 1924 to serve as the assistant, then Associate Director of the Forest Products Laboratory in Madison, Wisconsin.

Leopold was unhappy at the Laboratory and resigned from the Forest Service in 1928 to take the lead in establishing a new profession-game management-which he modeled on the profession of forestry. His game survey of nine Midwestern States was funded by the Sporting Arms and Ammunition Manufacturers' Institute. These surveys were summarized in his 1931 *Report on a Game Survey of the North Central States*. Leopold's book *Game Management*, published in 1933, was based in part on his game survey work and helped define a new field of managing and restoring wildlife populations. Soon after the publication of his book, Leopold accepted an appointment to a new chair in the Department of Agricultural Economics at the University of Wisconsin. Although Leopold spent the next several decades with wildlife management issues, his interests expanded to the field of ecology, where he is most revered today.

In January 1935, Aldo Leopold, Bob Marshall, Benton Mackaye, Harvey Broome, Barnard Frank, Harold Anderson, Ernest Oberholtzer, and Sterling Yard founded the Wilderness Society. Leopold spent the fall of that year in Germany on a Carl Schurz fellowship studying forestry and wildlife management. During that same year he purchased a small, worn-out farm along the Wisconsin River—north of Baraboo, Wisconsin, in an area known as the “sand counties.” This was where the family (wife Estella and their five children) rebuilt the only standing structure on the property—the chicken coop—into a small cabin. This cabin became famous as “The Shack.” Trying to restore the health of the land, he planted thousands of trees on the property, slowly changing abandoned fields to a growing forest and restoring a low area into a wetland where waterfowl came flocking in to feed and rest. Daughter Nina wrote “as he transformed the land, it transformed him. By his own actions and transformation, Aldo Leopold instilled in his children (and students) a love and respect for the land community and its ecological functioning.” He used the farm to observe and write about nature. Graduate students were brought to “The Shack” many times to observe and discuss ecological matters. In 1936, Leopold helped found a society of wildlife specialists (it became the Wildlife Society in 1937).

His philosophy began to shift to a more ecological approach in the late 1930's. Susan L. Flader, in a biography of Leopold, characterized this shift: “Originally imbued like other early conservationists with the belief that man could rationally control his environment to produce desired commodities for his own benefit, Leopold slowly developed a philosophy of naturally self-regulating systems and an ecological concern with the land and a land ethic.” It was new way of thinking and acting toward the land. Leopold wrote about nature and people and that living with the land required a new or complete understanding of the interrelationship among all creatures. Author Amy McCoy noted that he “added unprecedented insight into the world of ecology and naturalism. He moved from believing in partial participation in nature, to the view that total integration is absolutely necessary to the healthy existence of the natural world, and of humans.” This would become the basis, still with us today, of a profound reverence for nature and the role that people play in the environment—a land ethic for people.

In 1939, the University of Wisconsin created a new department, the Department of Wildlife Management, with Leopold as its first chair. He held this position until his death. The new science and profession of wildlife management wove together the related fields of forestry, agriculture, ecology, biology, zoology, and education. He believed that people, who often destroyed landscapes, could use the same tools to help rebuild the land. Just before World War II, Leopold began working on a manuscript of ecological essays. It took several attempts to write and rewrite the volume, entitled *Great Possessions*, which was finally accepted for publication by the Oxford University Press on April 4, 1948.

While at “The Shack” vacation home, smoke was spotted across the swamp on a neighbor’s farm. Leopold gathered his family, handed out buckets and brooms, and went with them to put out the fire. While fighting the fire, Aldo Leopold died of a heart attack at the age of 61 on April 21, 1948.

His ecological essays book was retitled and published as *A Sand County Almanac* in 1949. Over his lifetime, Leopold was involved with more than 100 organizations, many of which he served as an officer, president, or chair. Although Leopold, a gifted writer, wrote more than 350 articles, it was the books that he wrote—two of which were published posthumously (edited by Luna B. Leopold)—that have influenced today: *A Sand County Almanac* (1949) and *Round River, from the Journal of Aldo Leopold* (1953). *A Sand County Almanac* has sold millions of copies and is regarded as a classic with well-worn paperback copies in backpacks and book shelves across the country. Leopold has gained status as a prophet of the environmental movement and his legacy continues to the present, with scores of new books and articles appearing every year about him and his work.

#####