This thesis examines Henry David Thoreu's connections and relations to natural science. It presents Thoreau in broader context of rapidly developing nineteenth century American science. It follows his career and development as a writer and naturalist, emphasizing the role of science in this development, and identifies some of his sources and possible influences. It is based on extensive study of Thoreau's writings, especially his Journal and recently published and relatively unknown late natural writings. It compares and interperts Thoreau's works in relation to modern ecological science and introduces Thoreau as a predecessor and pioneer of ecological science and its various disciplines.