

Chapter 1 : Project MUSE - Cultivating an Ecological Conscience

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His father, Carl Leopold, was a businessman who made walnut desks and was first cousin to his wife, Clara Starker. Charles Starker, father of Clara and uncle of Carl, was a German immigrant, educated in engineering and architecture. Rand and Aldo Sommers although he eventually dropped the use of "Rand". Carl would take his children on excursions into the woods and taught his oldest son woodcraft and hunting. He was always out climbing around the bluffs, or going down to the river, or going across the river into the woods. Every August, the family vacationed in Michigan at the forested Les Cheneaux Islands in Lake Huron, which the children took to exploring. Hearing of this development, the teenaged Leopold decided on forestry as a vocation. The Burlington High School principal wrote in a reference letter to the headmaster at Lawrenceville that Leopold was "as earnest a boy as we have in school Moral character above reproach. He was considered an attentive student, although he was again drawn to the outdoors. Lawrenceville was suitably rural, and Leopold spent much time mapping the area and studying its wildlife. Forest Products Laboratory in Madison, Wisconsin, and became an associate director. In , he was appointed Professor of Game Management in the Agricultural Economics Department at the University of Wisconsin, the first such professorship of wildlife management. His children followed in his footsteps as teachers and naturalists: Leopold became a hydrologist and geology professor at UC Berkeley; Nina Leopold Bradley was a researcher and naturalist; Aldo Carl Leopold was a plant physiologist, [19] who taught at Purdue University for 25 years; and daughter Estella Leopold b. He purchased 80 acres in the sand country of central Wisconsin. The once-forested region had been logged, swept by repeated fires, overgrazed by dairy cows, and left barren. There, he put his theories to work in the field and eventually wrote his best-selling *A Sand County Almanac*, finished just prior to his death. Local ranchers hated these predators because of livestock losses, but Leopold came to respect the animals. He developed an ecological ethic that replaced the earlier wilderness ethic that stressed the need for human dominance. His rethinking the importance of predators in the balance of nature has resulted in the return of bears and mountain lions to New Mexico wilderness areas. He was prompted to this by the rampant building of roads to accommodate the "proliferation of the automobile" and the related increasingly heavy recreational demands placed on public lands. He was the first to employ the term "wilderness" to describe such preservation. Over the next two decades, he added ethical and scientific rationales to his defense of the wilderness concept. In one essay, he rhetorically asked, "Of what avail are forty freedoms without a blank spot on the map? Leopold thus rejected the utilitarianism of conservationists such as Theodore Roosevelt. In his book *Game Management*, Leopold defined the science of wildlife management as "the art of making land produce sustained annual crops of wild game for recreational use. The concept of "wilderness" also took on a new meaning; Leopold no longer saw it as a hunting or recreational ground, but as an arena for a healthy biotic community, including wolves and mountain lions. His portrayals of various natural environments through which he had moved, or had known for many years, displayed impressive intimacy with what exists and happens in nature. One of the well-known quotes from the book which clarifies his land ethic is, 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. In January I helped carry the first grey wolf into Yellowstone, where they had been eradicated by federal predator control policy only six decades earlier. Looking through the crates into her eyes, I reflected on how Aldo Leopold once took part in that policy, then eloquently challenged it. By illuminating for us how wolves play a critical role in the whole of creation, he expressed the ethic and the laws which would reintroduce them nearly a half-century after his death. The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: Yes, but just what and whom do we love? Certainly not the soil, which we are sending helter-skelter down river. 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. 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. Its headquarters is at the green-built Leopold Center, where it conducts educational and land stewardship programs. In , in collaboration with the United States Forest Service , the foundation released the first high-definition, full-length film about Leopold, entitled Green Fire: It was named in honor of Leopold. Since its founding, it has pioneered new forms of sustainable agriculture practices. It is "the only Federal research group in the United States dedicated to the development and dissemination of knowledge needed to improve management of wilderness , parks , and similarly protected areas. Oxford, Round River: Library of America,

Chapter 2 : Ecology (Stanford Encyclopedia of Philosophy)

Cultivating an Ecological Conscience: Essays from a Farmer Philosopher follows Kirschenmann's personal and professional evolution as a lifelong proponent of new agrarianism. Together with agricultural economist Constance L. Falk, Kirschenmann has compiled a collection of his essential writings on farming, philosophy, and sustainability.

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Chapter 3 : Aldo Leopold - Wikipedia

The ecological conscience stands or falls with the open society itself; its vision and values are entangled with the political morality of a pluralistic and panarchic way of life. That a society with multiple centers of power and rule has come to sustain—and to be sustained by—the values of the web of life is a historical achievement, hard.

Please contact mpub-help umich. Introduction With the aim of healing the earth and sustain a healthy ecosystem for all life forms, not humankind alone, ecoaesthetics emerges as a critique of Enlightenment mentality and of modern aesthetics as it is embodied in it. This mentality contributes greatly to the global ecological crisis and to other problem areas, such as population, economic, political and religious ones. In my understanding of aesthetics, ecoaesthetics is defined as the theory of ecological aesthetic appreciation. The first is our shared theme, which is the critique of modern aesthetics. The second reason is more complex for it involves the crucial question of the proper manner of aesthetic appreciation. From the perspective of ecoaesthetics, the contemplation of objects by a separated perceiver, an approach that is based on the modern philosophical dualism of subject and object, is unsatisfactory and inadequate. This emphasizes the ecological continuity or interrelatedness between the human appreciator and objects. Of course, any theory can occasion critique and development. This can be contrasted with Ecosophy T proposed by the Norwegian, Arne Naess, and with traditional Chinese aesthetic wisdom. In contrast with these, I would like to develop my own view of ecological understanding. I propose to construct a more comprehensive and reasonable ecoaesthetics. Ecosophy C contains eight points that are crucial for building an ecological model of aesthetic appreciation in this period of ecological crisis. In order to construct a more comprehensive and reasonable ecoaesthetics, my Ecosophy C contains 8 points that are crucial for me to build an ecological model of aesthetic appreciation for this period. His book Art and Engagement offers a detailed discussion about the idea and challenges the entire tradition of modern aesthetics, especially its dualism of subject and object. Berleant asserts that the concept of aesthetic engagement "claims continuity rather than separation" [2] and proposes that this conception of aesthetics centers on appreciative "experience characterized by continuity, perceptual integration, and engagement. Indeed, Berleant has received international attention for his work in the area of environmental aesthetics. So for Berleant, the central aesthetic issue now is not the difference between art and non-art but between aesthetic and non-aesthetic. The prevalent practice of equating aesthetics with the philosophy of art is thus transcended. From the perspective of my ecoaesthetics, I want to raise a more fundamental question: Is it possible for us to interpret them from the perspectives of scientific ecology, philosophical ecology, and ecosophy so as to support the ongoing project of constructing ecoaesthetics? Ecosophy C will offer an answer to that question from the perspective of traditional Chinese aesthetic wisdom. Naess is most famous for the idea of deep ecology. As compared with the science of ecology, the essence of deep ecology is to ask "deeper questions" and the adjective "deep" stresses the point that we ask "why" and "how," i. So, ecosophy or deep ecology involves "a shift from science to wisdom. This question inevitably implies a philosophical pursuit rather than scientific inquiry into the place of humanity in nature. In response to this philosophical pursuit, Naess realized clearly the limits of ecology and proposed what he called ecophilosophy or ecosophy. So ecosophy becomes "a philosophical world-view or system inspired by the conditions of life in the ecosphere. He encouraged his audience to develop his or her own systems of guides, say, Ecosophies X, Y, or Z. Inspired and encouraged by Naess, I propose my personal ecosophy, Ecosophy C. Chinese culture, which is my cultural background; 2. Confucianism, which I view as the cultural symbol of a global cultural ecosystem; 3. Continuity of being, the metaphysical and ontological promise of Chinese aesthetics; 4. Creating life, which is viewed as the great virtue of Heaven and Earth expressed significantly in one of the Chinese classics, The Book of Changes; 5. Cheng Hao, a philosopher in the Song Dynasty, whose aesthetic thought represents the most systematic expression of ecological appreciation in Chinese aesthetics; 7. Community, a key term in ecology, based on which Leopold developed his idea of ecological conscience; and 8. Within the context of this paper, the following section only discusses points 3, 5 and 7. In his essay entitled "The Ecological Conscience," Leopold defined ecology as "the science of communities" and consequently defined

ecological conscience as "the ethics of community life. In order to develop his land ethic, Leopold put the community concept in the central place. The single premise of all ethics is that an individual is a member of a community of interdependent parts. His land ethic simply enlarged the "boundaries of the community to include soils, waters, plants and animals or, collectively, the land" and affirmed the right of these resources to "continued existence in a natural state. It implies respect for his fellow-members, and also respect for the community as such. Based on his emphasis on the concept of community, Leopold expressed his value standard in a widely cited maxim: It is wrong when it tends otherwise. There is no integrity or stability at all. However, philosophically speaking from the perspective of human civilization, humankind should take preserving the integrity and stability of the earth as its value orientation. Only by doing so can humankind face the challenges of the global ecological crisis. Compassion generally means sympathetic pity and concern for the sufferings or misfortunes of others. However, with the awareness of the community concept and an ecological conscience based on it, it would be most reasonable to understand that "others" should include any individual member sharing the same community, no matter whether it is a plant or an animal. There is an appealing philosophical story about the joy of fish in Zhuangzi, the Chinese classic of Taoism: This is how the fish enjoy themselves. How do you know the fish are enjoying themselves? Zhuangzi did not answer these questions directly. We may "know" something scientifically, philosophically, or aesthetically. To some extent, it is a natural faculty of humans to understand or know this point. Briefly, the positive feeling of compassion is a kind of human ability and sensibility based on ecological ethics, which exemplifies the aesthetic intersubjectivity between human beings and non-human life. Community as a key term in ecology shows the interconnectedness or connectivity among community members, and compassion shows that the boundaries between things may disappear to some extent. How, then, should we understand connectivity and compassion philosophically or metaphysically? From the perspective of Chinese philosophy, we may propose the concept of "the continuity of being," which is the title of an essay by Tu Weiming, a Harvard professor of Chinese history and philosophy. In his paper, Tu introduces Chinese visions of nature and asserts: The Chinese belief in the continuity of being, a basic motif in Chinese ontology, has far-reaching implications in Chinese philosophy, religion, epistemology, aesthetics, and ethics. This kind of metaphysical assumption is significantly different from the Cartesian dichotomy between spirit and matter. Within the continuum, "the chain of being is never broken and a linkage will always be found between any given pair of things in the universe". I define ecoaesthetics as the theory of ecological appreciation. The basic assumption behind this working definition of ecoaesthetics is the following statement: So aesthetic and ecological engagement are the core of my ecoaesthetics. The following section of the paper will explain ecological engagement from the perspective of ecosophy C. First, ecological engagement inquires into the question of "why: The answer is that ecological engagement is based on the ontological assumption that everything within a community enjoys connectivity and continuity the continuity between mind, body and world with each other. Community may vary according to different geological and spatial scales, from a small pond to a mountain area, from the planetary earth to the entire universe. Ecoaesthetics should rest its philosophical base on this ecological worldview. An important part of ecological literacy, which includes an enhanced respect for and deeper feeling of connectivity with the different parts of the natural world, should be cultivated by ecological education. With the ontological assumption and worldview just described in mind, to engage with something ecologically means to be able to experience compassion for all life, human and non-human. Third, ecological engagement inquires into the question of "what: The answer to this question is that we should be aware of and appreciate the great transformational processes of the universe. This means that the perception of a landscape is not simply the awareness of scenery but of the complex and dynamic fields of energy transformation that are present. We have arrived at a new model of nature appreciation. In brief, as an ecological model of nature appreciation, ecological engagement may be called a "why-how-what" model of nature appreciation, which is the core of my ecoaesthetics. Cheng Xiangzhan chengxzh sdu. His fields of research include the history of Chinese aesthetics, environmental aesthetics, and ecological aesthetics. Published on December 30, A Critical Reader, eds. Estok and Won-Chung Kim Macmillan, , Arnold Berleant, Art and Engagement Philadelphia: Temple University Press, , xiii. Outline of an Ecosophy, trans. Cambridge University Press, , p. Oxford

University Press, , p. Tu Weiming, "The Continuity of Being: Chinese Visions of Nature," in *Confucianism and Ecology: The Interrelation of Heaven, Earth, and Humans*, eds. Ronald and Matthew C. Palmer Press, , pp. For more information please contact mpub-help umich.

Chapter 4 : The essay on philosophy about environmental

Aldo Leopold on "The Ecological Conscience" Leopold defends his position the advent of a new ethical development, one that deals with humans' relations to the land and its necessity. This relationship is defined as the land ethic, this concept holds to a central component referred to as the ecological consciousness.

This is a measure of the diversity of a community in the same way that the Shannon measure of information content is a measure of the variety in a signal. Unfortunately, though, there has been little success in tying these concepts to theoretical rules or even empirical generalizations. Stability turns out to be even more difficult to define. At the practical level, this definition faces the problem of vacuous scope: Moreover, almost every community experiences significant disturbances. Boxes 3 and 4 see below list some of the definitions of stability that have been in vogue and how they may be measured in the field. The only honest answer is that no one is sure. If diversity is interpreted as richness, traditionally, it was commonly assumed that diversity is positively correlated with at least persistence. However, there was never much hard evidence supporting this assumption. If stability is interpreted as a return to equilibrium, mathematical models that should answer questions about stability are easy to construct but hard to analyze unless the system is already close to equilibrium. This is called local stability analysis. The most systematic analyses performed so far give no straightforward positive correlation. Resilience " rate at which a system returns to a reference state or dynamic after a perturbation. Resistance " inverse of the magnitude of the change in a system, relative to a reference state or dynamic after a perturbation. Change of species composition relative to the original composition. Perturbation-Independent Categories Measure Constancy. Inverse of the variability of a system community or population. Ability of the system to continue in a reference state or dynamic. The time a system sustains specified minimum population levels, e. The time a system will sustain specified species compositions. The traditional assumption of a general positive correlation between diversity as richness and stability has been seriously challenged on both theoretical and empirical grounds since the s. Meanwhile, Pfisterer and Schmid have produced equally compelling empirical evidence that richness is inversely correlated with stability, interpreted as resilience and resistance. At least at the theoretical level, this remains an open field for philosophers. Clear formal results would not go unnoticed by ecologists. Within community ecology, philosophers have lately paid considerable attention to the theory of island biogeography and the controversies surrounding its relevance for the design of networks of biological reserves. But, what is the form of this relationship? Moreover, what is the mechanism responsible for it? In spite of sporadic work over almost an entire century, these remain open questions. Perhaps the most popular answer to the first question, but one that gives no hint of the operative mechanism, is a power law going back to Arrhenius: Larger areas were presumed to have greater habitat heterogeneity and could, therefore, host a larger number of species each with its own specific needs. In recent years the relation is more often attributed to the belief that larger areas can support larger populations of any species. Consequently, on the average, more species are likely to be present in larger areas than smaller ones even if both started with the same species richness. Whether the species-area curve rather than the mere qualitative relation has any empirical support remains a matter of contention. There is a dynamic equilibrium in the sense that this number does not change over time though there is a turnover of species which changes the composition of the community. The immigration rate varies inversely with the degree of isolation while the extinction rate decreases with area. Thus, this theory incorporates the second mechanism for the species-area relation mentioned in the last paragraph. While some initial experimental evidence seemed to support the theory, by the mids its status had become controversial. The initially prevalent view, based on island biogeography theory, was that reserves should be as large as possible. Meanwhile the species-area curve also began to generate serious skepticism. Important early criticism of the use of island biogeography theory for reserve network design came from Margules and several collaborators in By , it became clear that there would be no winner in the SLOSS debate; since then there has been no unequivocal role for island biogeography theory to play in the design of biodiversity reserve networks. Should ecosystem ecology, then, be regarded as an instance of the unification of the physical and

biological sciences? There has been so little philosophical attention to ecology that this question does not appear ever to have been broached. They also demanded that other specialists, including geochemists and soil scientists, be brought in so that all the relevant physical parameters of ecosystems, besides the biological ones, could be tracked simultaneously. The trouble was that, at this level of analysis, very few general claims could be sustained. Those that could—for instance, that Sun is ultimately the source of all energy in biological systems or that primary producers have to contain chlorophyll or some other such molecule—were usually trivial and well-known long before the initiation of systematic large-scale ecosystem studies in the s. Usually ecosystem studies produced detailed analyses of nutritional or climatic requirements of particular communities. But the details of nutritional requirements were either so general as to be almost irrelevant, or so specific that they were rarely transportable from one ecosystem to another. Almost all of what is known about climatic requirements of vegetation types and other communities was known to biogeographers long before the invention of ecosystem studies. The carbon and nitrogen cycles had also been worked out long before the advent of ecosystem studies as an organized discipline. However, the physical characteristics of habitats do matter to organisms living in them. Moreover, physical changes on a global scale, for instance, climate change through global warming, have serious long-term implications for biota. In another example, Aerts and Chapin provide a systematic review of nutritional ecology of wild plants including nutrient-limited growth, nutrient acquisition, use efficiency, and recycling through decomposition. What has made much of the new work possible is not only increased experience with ecosystems but also significant technical innovation, including the advent of high-speed microcomputers, satellite imagery, and Geographic Information Systems GIS which will be discussed next in Section 5. The future of ecosystem ecology appears much more secure today than it did a decade ago.

New Directions There have been two recent developments in ecology which are of general philosophical interest; moreover, they help mitigate the problems of complexity and uniqueness noted in Section 1. Both developments were made possible by the astronomical increase in the speed and ease of computation since the early s. The exceptions are age and stage; the age or stage structure of populations the fraction of individuals in each age or developmental stage class is sometimes incorporated in the traditional models of population ecology. The interactions between individuals are incorporated into the model. Since, because of their sheer complexity, such models are typically impossible to study analytically, they are studied by simulation on a computer. The wealth of detail that can be incorporated into IBMs allows specific predictions to be made. Part of the attraction of IBMs has been their relatively greater predictive success compared to other types of ecological models. These models have even been used to assess change on a global scale. For instance, forest models which are among the most successful IBMs have been used to assess the result of climate change on the atmosphere because of a potential breakdown of the presumed balance between production and decomposition of carbon-containing compounds. Such an extrapolation of scale relies on sampling each of the terrestrial lifezones and constructing some IBMs for all of them, and subsequently integrating the results. IBMs have also recently begun to be used for population viability analysis, tracking the trajectory of each individual during its lifetime. In both the situations discussed here, the main problem with the use of IBMs is the immense quantity of reliable data that they require. More specifically, such a reductionism amounts to the assumption that properties and interactions of individuals alone suffice to explain all behavior at the level of populations and higher units: Moreover, since interactions between individuals of different species can also be incorporated into these models, community-level properties can also potentially be explained by IBMs. For instance, the structure of food webs can potentially be explained by IBMs that take into account habitat size and resources. In this sense, community ecology, like population ecology, is also being reduced to IBMs. Demarcation ambiguity is not a problem for IBMs; rather, it is a virtue. It remains surprising how little philosophical attention IBMs have so far received. If they succeed, they will help end the long and, at least arguably, sterile tradition of anti-reductionism or holism in ecology. Nevertheless, an important limitation of IBMs should not go unnoticed: Are the dynamical rules responsible for some behavior? Or the structural constraints, such as the initial conditions? Or the precise parameter values? To answer such questions—which is at least part of what theoretical understanding consists of—minimally requires the simulation of a large class of related models, often hard to achieve in practice. It remains the case

that these questions can often easily be answered using traditional mathematical models: Thus any defense of reductionism in ecology based on IBMs must be very limited. GIS came along at a time when ecologists had already begun to explore the role of spatial structure on the dynamics of populations, communities, and ecosystems. Within spatial ecology these were represented as entities having spatial relations with each other, besides the traditional ecological relations defined by their interactions. The advent of GIS allowed the replacement of this idealization with more veridical spatial relations. Since philosophers of science have so far paid little attention to the history or implications of GIS technology, the discussion here will be somewhat more detailed than the treatment of other aspects of ecology. GIS originated in sparsely-populated Canada which, until the s, at both the federal and provincial governmental levels, viewed land and other resources as unlimited. The late but inevitable realization that this was not the case led the Canadian federal government to initiate a national inventory of land and other natural resources. At the technical level, when the CGIS project was initiated, there was no prior experience on how to structure geographical data internally within the computer ; there were no techniques for the overlay of maps or for calculating area. An experimental scanner to scan map data had yet to be built. Among conceptual innovations, the most important was the distinction between: Polygons need not have the same size or geometry. When ecological populations and communities are modeled in a GIS framework, explicit asymmetric irregular spatial information can be incorporated without unrealistic simplifying assumptions such as that of representing the spatial structure as a square or some other regular geometric grid. The exploitation of this possibility takes spatially explicit ecological modeling beyond its traditional confines in which the only spatial structures that could be considered are those with regular geometries. Though GIS-based ecological modeling is still in its infancy and an early example will be discussed in the next paragraph , it is clear that these techniques will allow the construction of spatially-explicit ecological models at a level of detail that was impossible before. Moreover IBMs can now be constructed with such detailed spatial representation. Vectorization is the replacement of these point-based structures by lines that are naturally interpreted such as boundaries of habitat types. What is critical is that these lines can then be joined to form polygons. Raster data can be obtained from a variety of sources including maps and photographs; in the present context what is critical is that raster data can be obtained by remote sensing through satellite imagery from which the distribution of many vegetation and soil types can be inferred. The GIS package was used to integrate topographic, soil, vegetation and climatic data from a variety of sources including the results of remote sensing.

Chapter 5 : "Aesthetic Engagement, Ecosophy C, and Ecological Appreciation"

Aldo Leopold and the Ecological Conscience Edited by Richard L. Knight and Susanne Riedel. This book offers assessments of Aldo Leopold's continuing influence on environmental management practice and philosophy, and his broader impact on environmental attitudes generally, as the patron saint of conservation.

Additional Information In lieu of an abstract, here is a brief excerpt of the content: The body of the essay consists of case studies, one of which summarizes the complaints aired in "Adventures of a Conservation Commissioner," and its "Upshot" incorporates the perspective detailed in "Conservation: In Whole or in Part? Our "progress" still consists largely of letterhead pieties and convention oratory. The only progress that counts is that on the actual landscape of the back forty, and here we are still slipping two steps backward for each forward stride. The usual answer to this dilemma is "more conservation education. Is something lacking in its content as well? I think there is, and I here attempt to define it. The basic defect is this: We have told him that if he will vote right, obey the law, join some organizations, and practice what conservation is profitable on his own land, that everything will be lovely; the government will do the rest. This formula is too easy to accomplish anything worthwhile. It calls for no effort or sacrifice; no change in our philosophy of values. It entails little that any decent and intelligent person would not have done, of his own accord, under the late but not lamented Babbitian code. No important change in human conduct is ever accomplished without an internal change in our intellectual emphases, our loyalties, our affections, and our convictions. The proof that conservation has not yet touched these foundations of conduct lies in the fact that philosophy, ethics, and religion have not yet heard of it. We have told b. Ul do the root. Ecology is the science of communities, and the ecological conscience is therefore the ethics of community life. I will define it further in terms of four case histories, which I think show the futility of trying to improve the face of the land without improving ourselves. I select these cases from my own state, because I am there surer of my facts. The farmers were told in that if they would adopt certain remedial practices for five years, the public would donate CCC labor to install them, plus the necessary machinery and materials. The offer was widely accepted, but the practices were widely forgotten when the five-year contract period was up. The farmers continued only those practices that yielded an immediate and visible economic gain for themselves. This partial failure of land-use rules written by the government led to the idea that maybe farmers would learn more quickly if they themselves wrote the rules. This said to the farmers, in effect: Each county may write its own rules, and these will have the force of law. There has been visible progress in such practices as strip-cropping, pasture renovation, and soil liming, but none in fencing woodlots or excluding plow and cow from steep slopes. The farmers, in short, selected out those remedial practices which were profitable anyhow, and ignored those which were profitable to the community, but not clearly profitable to themselves. The net result is that the natural acceleration in rate of soil-loss has been somewhat retarded, but we nevertheless have less soil than we had in I hasten to add that no one has ever told farmers that in land-use the good of the community may entail obligations over and above those dictated by self-interest. The existence of such obligations is accepted in bettering rural roads, schools, churches, and baseball teams, but not in bettering the behavior of the water that falls on the land, nor in the preserving of the beauty or diversity of the farm landscape. Land-use ethics are still governed wholly by economic self-interest, just as social ethics were a century ago. The exclusion of The Ecological Conscience cows from woods and steep slopes is not convenient, and is not done. Moreover some things are being done that are at least dubious as conservation practices: The upshot is that woods, marshes, and natural streams, together with their respective faunas and floras, are headed toward ultimate elimination from southern Wisconsin. All in all we have built a beautiful piece of social machinery-the Soil Conservation District-which is coughing along on two cylinders because we have been too timid, and too anxious for quick success, to tell the farmer the true magnitude of his obligations. Obligations have no meaning without conscience, and the problem we face is the extension of the social conscience from people to land. Paul Bunyan had tired easily of salt pork and corned beef, hence he had taken good care to see that the deer of the original pineries found their way regularly to the stewpot. But by the time the brushfields sprang into being, the wolves had been wiped out

and the state had passed a buck-law and established refuges. The stage was set for an irruption of deer. The deer took to the brushfields like yeast tossed into the sourdough pot. By the woods were foaming with them, so to speak. We Conservation Commissioners took credit for this miracle of creation; actually we did little but officiate at the birth. A tourist from Chicago could drive out in the evening and see fifty deer, or even more. This immense deer herd was eating brush, and eating well. What was this brush? It consisted of temporary short-lived sun-loving trees and bushes which act as a nurse crop for the future forest. The forest comes up under the brush, just as alfalfa or clover come up under oats or rye. In the normal succession, the brush is eventually overtopped by the forest tree seedlings, and we have the start of a new forest. In anticipation of this well known process, the state, the counties, the U. Forest Service, the pulp mills, and even some lumber mills staked out "forests" consisting, for the moment, of brush. The state embarked on a tax subsidy, called the Forest Crop Law, to encourage landowners to hang onto their brushfields until they were replaced by forest. But we failed to reckon with the deer, and with deer hunters and resort owners. In we had a hard winter and many deer starved. It then became evident that the original "nurse-trees" had grown out of reach of deer, and that the herd was eating the oncoming forest. The remedy seemed to be to reduce the herd by legalizing killing of does. But for five consecutive years the deer hunters and resort owners, plus the politicians interested in their votes, have defeated all attempts at herd-reduction. I will not tire you with all the red herrings, subterfuges, evasions, and expedients which these people have used to befog this simple issue. There is even a newspaper dedicated solely to defaming the proponents of herdreduction. These people call themselves conservationists, and in one sense they are, for in the past we have pinned that label on anyone who loves wildlife, however blindly. These conservationists, for the sake of maintaining an abnormal and unnatural deer herd for a few more years, are willing to sacrifice the future forest, and also the ultimate welfare of the herd itself. The motives behind this "conservation" are a wish to prolong easy deer hunting, and a wish to show numerous deer to tourists. These perfectly understandable wishes are rationalized by protestations of chivalry to does and fawns. As an unexpected aftermath of this situation, there has been a large increase of illegal killing, and of abandonment of illegal carcasses in the woods. Thus herd-control, of a sort, is taking place outside the law. But the food-producing capacity of the forest has been overstrained for a decade, and the next hard winter will bring catastrophic starvation. After that we shall have very few deer, and these will be runty from malnutrition. Our forest will be a moth-eaten remnant consisting largely of inferior species of trees. The basic fallacy in this kind of "conservation" is that it seeks to conserve one resource by destroying another. These "conservationists" are unable to see the land as a whole. They are unable to think in terms of community rather than group welfare, and in terms of the long as well as the short view. There is an important lesson here: To understand the deer problem requires some knowledge of what deer eat, of what they do not eat, and of how a The Ecological Conscience forest grows. The average deer hunter is sadly lacking in such knowledge, and when anyone tries to explain the matter, he is branded forthwith as a long-haired theorist. This anger-reaction against new and unpleasant facts is of course a standard psychiatric indicator of the closed mind. We speak glibly of conservation education, but what do we mean by it? If we mean indoctrination, then let us be reminded that it is just as easy to indoctrinate with fallacies as with facts. If we mean to teach the capacity for independent judgment, then I am appalled by the magnitude of the task. The task is large mainly because of this refusal of adults to learn anything new. The ecological conscience, then, is an affair of the mind as well as the heart. It implies a capacity to study and learn, as well as to emote about the problems of conservation. I bought it because I wanted a place to plant pines. One reason for selecting my particular farm was that it adjoined the only remaining stand of mature pines in the County. This pine grove is an historical landmark. It is the spot or very near the spot where, in , a young Lieutenant named Jefferson Davis cut the pine logs to build Fort Winnebago. He floated them down the Wisconsin River to the fort. In the ensuing century a thousand other rafts of pine logs floated past this grove, to build that empire of red barns now called the Middle West. This grove is also an ecological landmark. It is the nearest spot where a city-worn refugee from the south can hear the wind sing in tall timber. It harbors one of the best remnants of deer, ruffed grouse, and pileated woodpeckers in southern Wisconsin. My neighbor, who owns the grove, has treated it rather decently through the years. When his son got married, the grove furnished lumber for the new

house, and it could spare such light cuttings. But when war prices of lumber soared skyward, the temptation to slash became too strong. Today the grove lies prostrate, and its long logs are feeding a hungry saw. By all the accepted rules of forestry, my neighbor was justified in slashing the grove. The stand was even-aged; mature, and invaded by heart-rot. Yet any schoolboy would know, in his heart, that there is something wrong about erasing the last remnant of pine timber from a county. When a farmer owns a rarity he should feel some obligation as its custodian, and a community should feel some obligation to help him carry the economic cost of custodianship. Yet our present land-use conscience is silent on such questions.

Chapter 6 : Project MUSE - The River of the Mother of God

Cultivating an Ecological Conscience - OverDrive Cultivating an Ecological Conscience: Essays from a Farmer Philosopher documents Kirschenmann's evolution and his lifelong contributions to the new agrarianism in a collection of his greatest writings on farming, philosophy, and sustainability.

Additional Information In lieu of an abstract, here is a brief excerpt of the content: While my academic training is theology, my energies in the past twenty-five years have been devoted to farming. So my observations about food and farming are more informed by the earthworm and plow than by Plato or Husserl. I can only hope that what I have to offer in some small way contributes to the legacy of Willard Eddy and to the important work that philosophy needs to undertake today. Anyone working to reshape the food system as we enter the twentyfirst century might be seen as working on a solution for which there is no problem. For decades now, most of our major food-related institutions, such as the USDA, FDA, the American Grocers Association, agricultural commodity groups, and even land-grant universities have assured us that our food system is the envy of the world. Our agriculture not only produces the safest, most nutritious food in the world, it does so more efficiently than any other. Americans now spend less than 10 percent of their earned This is a transcript of the talk Frederick Kirschenmann gave for the annual Willard O. Collins, Colorado, September 28, During his fifty-six years at Colorado State, Eddy founded the honors program and the philosophy department, and he is credited with promoting interdisciplinary study and international understanding. Supermarket shelves bulge with more food than we could hope to eat. Concern about potential food shortages in a world of rapidly expanding human population may be justified, but for the immediate future, farmers are oversupplying most key commodity markets to the point of depressing farm prices below their cost of production. So where is the problem? The growing number of problems related to our food and agriculture industry can perhaps be clustered into three groups: Loss of Good Will First, agriculture has a public perception problem. For Native Americans, who occupied this continent for almost fifteen thousand years before Europeans arrived, agriculture was perceived as a way to keep everyone in the village fed while disturbing nature as little as possible. For many tribes, the goal was to follow a code of conduct that satisfied both ancestors and descendants for at least seven generations. Agriculture was a critical part of that public trust. In the early s, the Puritans arrived with a very different vision for agriculture. That frame of mind still influences us today. For most of the eighteenth and nineteenth centuries, agriculture was key to creating a democratic republic. A country of landholding farmers, beholden to no one, would ensure that everyone could speak their minds and vote their conscience. Thomas Jefferson was a principal promoter of this vision, and it was certainly in his mind when he signed the Louisiana Purchase. In these visions, agriculture was You are not currently authenticated. View freely available titles:

Chapter 7 : Aldo Leopold and the Ecological Conscience - Google Books

In Aldo Leopold and an Ecological Conscience ecologists, wildlife biologists, and other professional conservationists explore the ecological legacy of Aldo Leopold and his A Sand County Almanac and his contributions to the environmental movement, the philosophy of science, and natural resource management.

It called for a massive use of chemical fertilizers to offset the destruction of topsoil and the depletion of natural fertility. It called also for the displacement of nearly the entire farming population and the replacement of labor and good farming practices by machines and toxic chemicals. A vanguard of farmers and agriculturists called out for a rejection of industrial farming and a return to natural farming and the agrarian philosophy that has long been a part of American culture. Writers like Wendell Berry and Wes Jackson promoted regionalism, expressed concerns about fossil fuel dependency, and advocated knowing the land and every nuance of the biotic community. They pursued a land ethic grounded in a deep reverence for life, the planet, and the grand mystery behind it all. Though these New Agrarians, as they are now called, were every bit as ecologically sophisticated as the first wave of environmental scientists, the environmentalists were, for the most part, linked to the liberal social movement of the sixties and the New Agrarians tended to be socially conservative with traditional Christian values. One might argue that because of this elemental difference, the two groups never fully connected. Looking back this seems a shame. Both groups had much to offer each other and to the conjoining of the environmental movement with American agriculture. To this day, sadly, environmentalist and farmers are still some distance apart. The writing and work of farmer, agrarian, and philosopher Frederick L. Kirschenmann, however, provides some hope for bridging this gap. His recently published collection of essays, *Cultivating an Ecological Conscience*, with its clear concern for the part petroleum plays in modern agriculture, offers significant common ground for farmers and carbon-footprint conscious, twenty-first century environmentalists to agree upon. Kirschenmann is not as widely known as Wendell Berry or Wes Jackson, but he was and still is one of the essential voices of the New Agrarian movement. A Series in the New Agrarianism is testimony to this. If you are not familiar with Kirschenmann or the New Agrarianism or its related agricultural philosophy, this collection is a good place to start. As a young man, he left the farm to attend the Hartford Theological Seminary and later received a PhD in Historical Theology at the University of Chicago in preparation for what appeared a budding academic career. Clearly, we are talking about a man who has been actively involved at the leading edge of agriculture for a good portion of his life. A passage from that first essay demonstrates this point: Throughout there is a pervading theological sentiment, generally understated, but still giving the sense of the sacred to the discussion, and adding a rather uplifting moral quality to caring for the planet and the full set of relationships life engenders. While the essays dissect a wide spectrum of agricultural issues from the discussion of natural farming practices to an extended critique of biotechnology to the essentials of food and community on a planet with limited natural resources, the book as a whole seems to hinge on one absolutely critical philosophical question. Kirschenmann spells it out in an essay toward the end of the book, "Challenges Facing Philosophy," when he asks rhetorically "who are we "as a species and how [do] our feeding habits affect the world in which we live? More importantly, agriculture may play a key role in unfurling the ecological revolution ahead.

Chapter 8 : Cultivating an ecological conscience (a book review) - Resilience

Cultivating an Ecological Conscience is an absolutely essential read for all those unfamiliar with the direction of cutting edge agriculture and a positively uplifting read for all those who are already there and seeking ways to connect environmental concepts with the production of food in the twenty-first century.