

Proposal for a Thesis
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in Partial Fulfillment of the Requirements
for the Master of Liberal Arts Degree

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I.

Tentative Title:

“Literary Legacy: Rachel Carson’s Influence on Contemporary Women Nature Writers”

II.

Research Problem:

Rachel Carson is best known for her environmental work, *Silent Spring*. This text ignited the environmental movement in the United States and many writers and environmentalists credit her ecological ideas and her warning about pesticides as inspiration for their own writing and activism.¹ However, Rachel Carson also wrote three books about the sea before *Silent Spring*. Popular science writing in the 1940s and 1950s, these books are now largely forgotten. Yet, within her sea trilogy, *Under the Sea-Wind* (1941), *The Sea Around Us* (1951), and *The Edge of the Sea* (1955), are the same themes that appear with stark force in *Silent Spring*. While these works share a thematic tie with *Silent Spring*, they are not explicitly activist texts, nor do they contain so dire a message. Instead, through imagery and scientific facts, they educate a lay public about the mysteries of sea and shore. By focusing solely on *Silent Spring* and ignoring her sea works, critics confine Carson to the limited, albeit important, roles of scientist and activist while largely ignoring her as a writer of literature engaged in an art form, not solely the communication of facts.

In my thesis I intend to establish Carson’s unique position among US nature writers. Additionally, with evidence from Carson’s biographer, Linda Lear, and Carol B. Gartner, as well

¹ Carson has influenced such diverse persons as Sandra Steingraber a biologist, writer and environmental activist, to Terry Tempest Williams who writes poetry, memoir and essays to Ursula LeGuin, famous for her science fiction writing.

as other critics like Susan Power Bratton, and Janet Montefiore, I will perform a close reading of Carson's three sea books as literature in which I will illuminate her rhetorical techniques that manifest her ecocentric ideas through the devices of literature. Furthermore, I will demonstrate that women nature writers, writing in the 1970s and 1980s, exhibit striking similarities to Carson's writing in their works, particularly her ecocentric ideas and her rhetorical choices, suggesting a dialog between their writing and Carson's. Specifically, I will analyze Annie Dillard's *Pilgrim at Tinker Creek* (1974), Sue Hubbell's *A Country Year* (1986), and Ann Zwinger's *Run, River, Run* (1975). *Pilgrim at Tinker Creek* is a Thoreauvian nature essay in which the natural world provides the clues through which the narrator, a semi-autobiographical Dillard, tries to understand the nature of God. Sue Hubbell similarly structures her writing as a progression of the seasons in *A Country Year*, but, instead of in rural Virginia, where Dillard set her essay, Hubbell's experiences are on her bee farm in the Ozarks. Zwinger tackles yet another part of the country, the West, in *Run, River, Run*, in which she maps the Green River from source to mouth, writing about the flora and fauna, geological details, and the history of the river as well as providing her own illustrations.

The critical study of nature writing is a slippery subject. There are so many texts in fiction, non-fiction, and poetry that could be considered nature writing. In his 1990 study *Nature Writing and America*, Peter A. Fritzell distinguishes American nature writing stating, "... in its preeminently Thoreauvian form, [nature writing] is fundamentally an American phenomenon; that it arose from an uneasy, inherently unstable, and especially American attempt to meld or blend the traditions and forms of Aristotle's *Historia Animalium*, on the one hand, and Saint Augustine's *Confessions*, on the other" (Fritzell 3). Fritzell suggests that Thoreau's *Walden* and other works with a similar style make up the quintessential type of US nature writing. Moreover,

Thoreauvian writing consists of a scientific spirit of inquiry and objective observation combined with a self-reflective and often a spiritual element.

In this thesis I intend to demonstrate that Carson, while influenced by the Thoreauvian tradition, sets herself apart as a different type of nature writer. Carson stands in contrast to the Thoreauvian form for a few reasons. Most importantly, Carson presents an ecological view of nature in which humans are merely one more member of the complex systems connecting the planet's natural world. Her work represents a paradigmatic shift away from humans as the center of the traditional, contemplative nature essay.² In addition to this difference from Thoreauvian nature writing, Carson also combined what she termed "science and sentiment," essentially, mixing hard scientific fact with a more emotional component.³

While other nature writers may not have shared Carson's background as a professional scientist, it is important to note that they also mixed scientific observations with emotion. For example, John Burroughs, a predecessor of Carson, wrote about the need to blend these two approaches to nature; also, Aldo Leopold, more contemporaneous to Carson, is famous for his ecocentric "land ethic." Therefore, despite the importance of Carson's writing, it should be recognized that Carson was not the first writer to decentralize the human element in her texts or to combine hard science with emotion.

The important questions I will investigate are: What are Carson's contributions to the nature essay in the US? How did Carson's ecological theory manifest in her literary choices and techniques for nature writing in her three sea books? Why have other US women nature writers

² See Maril Hazlett's chapter, "Science and Spirit, Struggles of the Early Rachel Carson" in *Rachel Carson: Legacy and Challenge* edited by Lisa H. Sideris and Kathleen Dean Moore in 2008

³ Maril Hazlett explains that, by mixing scientific facts with a more emotional response to nature, Carson was breaking down a fundamental dichotomy of her time: "In the case of nature study, anything labeled 'sentimental' became associated with feminine and thus inferior terrain. 'Hard' science came to be associated with a superior, more masculine approach. ...In this combination, *The Sea Around Us* was itself a revolutionary book, albeit now dwarfed by the subsequent impact of *Silent Spring*" (Hazlett 151-157).

used Carson's literary techniques in their own essay writing? How have other US women nature writers used or adapted elements of Carson's technique and style? Why should we read current nature writers with Carson's literary techniques in mind?

I intend to show that Carson differs from her predecessors in a few important ways: first, in her sea books, nature does not serve to illuminate some greater teleological end; second, a first person narration is not the central, directing agent of her texts; third, Carson's ecological community transcends the familiar members of the animal kingdom beloved of birder and woodsman to include the unfamiliar and the unobserved. The effectiveness with which she communicated these ideas also sets her apart in the canon of nature writers.

I propose that the scientific ecological consciousness that is the unique feature of all of Carson's writing manifests itself via Carson's literary art. In order to best understand Carson's ecological ideas, in fact, her science in general, we must first comprehend the relationship between science and literature in her books. There are three rhetorical techniques I will analyze: 1) her blending of scientific language with poetic devices, specifically, Carson combines the technical jargon of biology, geology, and oceanography with poetic language characterized by attention to sound, imagery, and figurative language, 2) a decentralized human narrator, and 3) a thematic reverence for all life. These rhetorical choices constitute a literary legacy embraced by contemporary US women nature writers. Furthermore, I believe these writers, specifically Dillard, Hubbell, and Zwinger, have adopted and adapted Carson's rhetorical techniques in order to more accurately express their own relationship to nature and, by extension, the human relationship to the natural world.

Ecofeminism is an important branch of nature writing criticism at present. However, by its very nature it attempts to draw a distinction between male and female styles of writing.

Despite that fact that all of the writers I am studying are female, which seems to lend itself to an ecofeminist study, only one of these writers, Ann Zwinger, actively embraces a feminist agenda in her writing. Consequently, the voices of Hubbell, Dillard, and even Carson have been largely ignored by this current critical perspective. For example, although these women have brief entries in anthologies of female nature writers, such as *At Home on This Earth: Two Centuries of U.S. Women's Nature Writing* edited by Lorraine Anderson and Thomas S. Edwards in 2002 and Lorraine Anderson's *Sisters of the Earth*, ecofeminists critics have difficulty including them in their discourse. Dillard does not make it into Vera Norwood's study of women and nature from Susan Fenimore Cooper to the present (1993), and Hubbell is mentioned only briefly. Even Carson herself is ignored by ecofeminists. According to Lisa Sideris's chapter "The Ecological Body: Rachel Carson, Silent Spring, and Breast Cancer," for Carson, "'Controlling' and 'caring for' the environment were not mutually exclusive imperatives. Perhaps because Carson held this view, environmentalists in the ecofeminist camp generally pay scant attention to Carson's work, despite her unique position as a prominent female environmentalist and science writer in a prefeminist era" (Sideris 143). While ecofeminists have done important work, relocating women's writing, locating common themes of the masculine oppression and exploitation of women and nature, and in trying to find commonalities among female authors, the perspective does limit their analysis of women who do not consider themselves feminists or ecofeminists or who also incorporate ideas identified by ecofeminists as traditionally masculine. Therefore, by reading Dillard, Hubbell, and Zwinger, as I propose, with an eye to Carson, rather than ecofeminism, not only can we better understand and appreciate their author's relationship to nature through their similar literary choices, but we revive their voices as an important and

enriching part of the ongoing conversation of American nature writers concerned with humans' right relationship with the Earth.

III.

Definition of Terms:

“Nature essay”: the difficulty with this term is that nearly everyone who writes criticism on nature writing defines the term differently and because the term ‘nature’ is also hotly debated. Some important critics who have defined this type of writing are Thomas Lyon, Lawrence Buell, John Elder, Don Scheese, Daniel J. Pilippon, Peter A. Fritzell, Thomas S. Edwards, and Elizabeth DeWolfe, to name a fraction of the men and women who have addressed this topic. I believe the critic who best defines the works I am researching is Don Scheese in his work *American Nature Writers Vol.1*. He defines it as “...a first person nonfiction narrative based on an appreciative aesthetic response to a scientific view of nature.” This definition works well because it mentions both science and emotion and is general enough to cover nearly all of my primary sources, though Carson’s *Under the Sea-Wind* does not use a first person narration. The way in which this definition does not perfectly fit Carson’s text will be important to my analysis of her unique style.

“Sentiment”: a term used by Rachel Carson, according to her biographer, Linda Lear, to imply a response to nature opposite to a scientific approach.

“Anthropocentrism”: a worldview that places humans at the center, and therefore the place of most importance in nature.

“Ecocentrism”: a term sometimes used interchangeably with ‘biocentrism’ which indicates a focus on the environment and humans as only one of the many species that inhabit it rather than viewing humans as the most important part or center of the natural world.

“Ecofeminism”: – the critical, theoretical perspective that the world’s largely patriarchal society is responsible for the destruction, domination and exploitation of both nature and women.

IV.

Background:

While Rachel Carson is perhaps best remembered as the woman who ignited the environmental movement through her book *Silent Spring*, Carson’s contributions to nature writing do not stop with her persuasive argument against pesticides or her impressive command of scientific facts which she renders comprehensible and memorable to the lay reader. Carson’s work as a scientist and activist should not be overlooked; however, her legacy is better understood if she is also acknowledged as a writer of literature, meaning, one whose manipulation of words has an artistic purpose, beyond the clear communication of facts. According to Carol B. Gartner’s 1983 book, *Rachel Carson*, “Carson herself believed that there is ‘no separate literature of science.’ ‘The aim of science,’ she said, ‘is to discover and illuminate truth. And that, I take it, is the aim of literature’” (Gartner 2). Not only did Carson believe the endgame was the same for literature and science writing, but she also used literary means to produce her desired outcome, though few critics have analyzed her writings as literature.

One of the reasons Carson’s literary qualities are ignored, I believe, is because critics overlook her three books about the ocean which were eclipsed in popularity by *Silent Spring*. Although Carson’s sea books: *Under the Sea-Wind*, *The Sea Around Us*, and *The Edge of the Sea* are perhaps not as well remembered, they contain many of the same themes and rhetorical strategies that drew the reading public to *Silent Spring*. Additionally, they represent a study in narration, point of view, and voice that differ slightly from *Silent Spring*. Carson does not use

the same point of view in all of her sea books, however. *Under the Sea-Wind* is unique because it uses a third person omniscient narrator who also looks at the ocean through the eyes of a variety of creatures such as Scomber the mackerel and Anguilla the eel, whereas *The Sea Around Us* and *The Edge of the Sea* employ a first person narrator who appears periodically throughout the dense chapters of scientific material. As a unit, these books demonstrate an experiment in voice which Lisa Sideris and Kathleen Dean Moore describe in their introduction to *Rachel Carson: Legacy and Challenge* edited by Sideris and Moore in 2008. They explain her use of voice as "...two distinct narrative voices with which she had experimented in her major works on the sea: the 'heavily masculine' voice of the scientist who coolly organizes, interprets, and summarizes reams of information, and the more feminine voice of the 'appreciative nature writer,' the close observer and participant, expressing wonder and enchantment with nature's mysteries" (Sideris and Moore 8). While their approach is a feminist one, these critics recognize Carson's literary work with voice and her characteristic combination of scientific fact and emotion. My own perspective will build on Sideris and Moore's analysis, but by shifting the focus away from "male" and "female" styles of writing I will reveal instead the nuanced relationship of Carson's literary and scientific seascape.

But Carson does not only employ voice. All of Carson's literary techniques stem from careful polishing of her work and her understanding of the relationship between human beings and the natural world. According to Carson's biographer, Linda Lear, and critic Maril Hazlett, Carson's unique contributions to nature writing are her ability to convey scientific facts of great depth and scope in a poetic style and her ecological understanding of humans' place in nature. Take, for instance, this passage from *Under the Sea-Wind*: "The little globes of Noctiluca – just visible to the human eye – were each aglitter with submicroscopic grains of light within

themselves. During this autumnal period of their great abundance, every fish that moved where the swarms of protozoa were most dense was bathed in light; the waves that broke on reef or shoal spilled liquid fire; and every dip of a fisherman's oar was a flash of a torch in the darkness" (178). Here, Carson introduces her reader to a dinoflagellate and we learn that it produces light when disturbed. We also learn that they are most abundant in autumn in this part of the Atlantic Ocean. Yet, we might not even realize Carson is teaching us this scientific information because we focus on the beauty of the imagery in the last sentence or because we are enchanted by the lyrical assonance in 'liquid' and 'dip,' 'oar' and 'torch.' In addition to her blend of science and poetry and her ecological view I would also like to examine Carson's reverence for all life, regardless of how alien or inconsequential it may seem, as also demonstrated by the subject matter of the previously quoted passage. Since I will be mainly focusing on Carson's literary techniques that are common across all three of her sea books, I will be treating these books as a cohesive whole, rather than highlighting the contrasts between them. However, I will make some exceptions for *Under the Sea-Wind*, which has a different narration and structure than her other two ocean works. A firm understanding of Carson's techniques will be the foundation from which I will build my analysis and conclusions about my three contemporary female nature writers. The first section of my thesis will draw on a variety of critics, from Lear to Lisa H. Sideris and Kathleen Dean Moore to Carol B. Gartner, to Susan Power Bratton, who examine Carson's voice and ecological themes and rhetorical techniques. The three rhetorical techniques mentioned above in the Research Problem section: blending scientific language with poetic devices, a decentralized narrator, and a thematic reverence for all life, will constitute my next three chapters in which I will analyze, compare and contrast the degree to which my contemporary writers adopt and adapt Carson's rhetorical choices.

Annie Dillard, Sue Hubbell, and Ann Zwinger are three very different nature writers. While Thomas Lyon in *This Incomparable Land* (2001) puts Dillard's *Pilgrim at Tinker Creek* in the nature writing category of a 'ramble' (Lyon 22), Dillard's status as a nature writer is contested by Don Scheese. Furthermore, Dillard, herself, said, in a *Publishers Weekly* interview in September of 1989 with Katherine Weber, "Rachel Carson had a Ph.D. and was a scientist, and I am not. She... was disseminating information I am disseminating a vision, and it's completely different'" (Weber). Yet, observe the similarities in Dillard's and Carson's passage on barnacle larva in *Pilgrim at Tinker Creek* and *The Edge of the Sea* respectively:

Carson:

(The British zoologist Hilary Moore, after studying barnacles on the Isle of Man, estimated a yearly production of a million million larvae from a little over half a mile of shore.)...No one knows how many of the baby barnacles riding shoreward on the waves make a safe landing, how many fail in the quest for a clean, hard substratum. (Carson *The Edge of the Sea* 54-55).

Contemplating the teeming life of the shore, we have an uneasy sense of the communication of some universal truth that lies beyond our grasp. What is the message signaled by the hordes of diatoms, flashing their microscopic lights in the night sea? What truth is expressed by the legions of the barnacles, whitening the rocks with their habitations, each small creature within finding the necessities of its existence in the sweep of the surf? ...The meaning haunts and ever eludes us, and in its very pursuit we approach the ultimate mystery of Life itself. (Carson *The Edge of the Sea* 250).

Dillard:

The barnacles encrusting a single half mile of shore can leak into the water a million million larvae.... But it is for gooseneck barnacles that I reserve the largest measure of awe. Recently I saw photographs taken by members of the Ra expedition. One showed a glob of tar as big as a softball... The tar had been in the sea for a long time; it was overgrown with gooseneck barnacles. The gooseneck barnacles were entirely incidental, but for me they were the most interesting thing about the whole expedition. How many gooseneck barnacle larvae must be dying out there in the middle of vast oceans for every one that finds a glob of tar to fasten to? ... What kind of a world is this, anyway? Why not make fewer barnacle larvae and give them a decent chance? Are we dealing in life, or in death? (Dillard 168-176).

Not only do Carson and Dillard use nearly the exact same wording from a separate source (“million million larvae” and “half a mile of shore”), but they both question the implication of those multitudes of barnacles. Carson suggests the “ultimate mystery of Life” can be pursued on the shoreline and Dillard tries to decipher if the barnacles point to a Creator obsessed with life or death. Because of the similarity between these passages and others in Dillard’s and Carson’s books, despite claims to the contrary, I will pursue a connection between these two authors. I will demonstrate how Dillard’s inclusion of scientific thinking and writing puts her in dialogue with Carson’s own writing and her ecological view, how Dillard also blends scientific facts and poetry in her own writing style and how she also studies all kinds of life, even beings that are strange or disturbing in their appearance or habits. I will be analyzing her Pulitzer Prize winning *Pilgrim at Tinker Creek* in which the author, in a manner very similar to Thoreau, reads nature to come to a better understanding of herself, but more importantly God. I will argue against Don Scheese’s contention that “To label the work of Annie Dillard ‘nature writing’ does

her a disservice. She is a nature writer, in the narrow sense of the term; but she is much more. Ultimately she addresses a much more important issue: the nature of nature itself” (Scheese “Annie Dillard” 214). I will instead suggest that Dillard is very much a nature writer with significant similarities to Carson’s work and I will reference Gary McIlroy’s article “Pilgrim at Tinker Creek and the Burden of Science” which identifies some important differences between Dillard’s work and Thoreau’s *Walden*.

Sue Hubbell and Ann Zwinger also incorporate Dillard’s techniques previously mentioned (blending science and poetry, incorporating an ecological view and studying all types of life) in a manner even more closely resembling that of Carson in their books *A Country Year* and *Run, River, Run*, respectively. And, in fact, both women have written introductions to republications of Carson’s sea books. I will cite these introductions as well as other interviews to establish the connection between these two women and Carson. Sue Hubbell’s *A Country Year* details her experiences on her bee farm in the Ozarks. Hubbell sees herself as just one of the many inhabitants of her piece of land. She writes, “Well, they [indigo buntings] think they own the place, and their assurance is only countered by a scrap of paper in my files. But there are other contenders, and perhaps I ought to try to take a census and judge claims before I grant them title” (Hubbell 5). She goes on to mention buzzards, goldfinches, wild turkey, phoebes, whippoorwills, cardinals, coyotes, and of course, bees. Hubbell engages in an interesting balancing game in which she, as the narrator, is central to the story, and its construction, yet she continually decentralizes herself through her focus on the animals on her land. This ecological understanding connects her to Carson. In addition, like, Dillard, Hubbell incorporates scientific fact and an interest in the insects in her house and property invisible or antagonistic to most humans, like mosquitoes and cockroaches. Unlike Carson and Dillard, Hubbell’s prose is more

conversational than poetic; however, she does include excerpts of other people's poetry in her writing.

If the books of three women were compared on their degree of similarity to Carson's sea works, Hubbell would have the middle ground while Zwinger's work would take the prize. Zwinger is most directly influenced by Carson. In an interview with Sidney I. Dobrin and Christopher J. Keller in 2005, Zwinger said, "And Rachel Carson's *The Edge of the Sea* is my idea of the perfect book; she made it possible for this timid Midwesterner, afraid of the sea, to walk into the ocean. The fact that she made it so fascinating made the difference" (Dobrin and Keller 306). In her own book Zwinger maps the Green River through a personal journey, hiking, canoeing, and flying over the river in *Run, River, Run*. She includes all manner of facts from geological information, much like that found in Carson's *The Edge of the Sea*, to the stories of the historical inhabitants to her own personal observations of flora and fauna as well as her own illustrations. Unlike Dillard and Hubbell, Zwinger's first person narration only intrudes occasionally, in the manner of Carson, to share a personal experience about or reaction to the river. However, she also blends a poetic prose with scientific evidence and also examines those creatures invisible to the naked eye in an interest in all life.

While I did not find many sources that analyze these two particular books individually, I will use Mark Allister's critique of Hubbell's work as well as the thoughts of those editors who have anthologized her work such as Lorraine Anderson and Thomas S. Edwards in *At Home on This Earth: Two Centuries of U.S. Women's Nature Writing* (2002). I will use the same anthology for Zwinger's work and Lisa Sideris and Kathleen Dean Moore's work, *Rachel Carson: Legacy and Challenge* (2008). Given the scarcity of resources, I hope this thesis will

help address the lack of critical work on *A Country Year* and *Run, River, Run*, while also connecting the writers to the larger body of nature writing.

Carson's ecological understanding of the environment and her reverence for all life is a necessary perspective for all concerned, intelligent nature writing today, especially in light of climate change and its implications for our planet. By demonstrating how Carson was an important writer of literature, not just a science writer, and by linking more contemporary US female nature writers with her legacy, I hope to show how literature continues to be an important part of protecting nature today.

V.

Research Methods:

For this thesis I will be analyzing and comparing/contrasting primary sources from all four women. I will also use biographical material and interviews to establish connections between the authors. There are a few critical essays I will address which oppose my ideas, but the bulk of the secondary writing I will include supports my argument through conclusions about the writing styles of my authors.

VI.

Research Limitations:

Despite the large number of writers from many different mediums who claim inspiration from Rachel Carson, the requirements of this thesis limit me to a small sample of authors. I have also chosen to write about women in order to find voices like Carson's, though many men owe a debt to Carson's writing. However, because Carson did not consider herself a feminist and does

not overtly discuss 'ecofeminism' in her books, meaning, the idea that women and nature have been exploited by a patriarchal society, I have also chosen women who similarly ignore this perspective, inevitably leaving out many important female nature writers like Terry Tempest Williams and Susan Griffin. Furthermore, I have limited those female writers to women who wrote nature essays like Carson, with nature as the primary focus, rather than as a backdrop, thus eliminating poetry, memoirs, and fiction. On a separate note, there is also a lack of critical essays on Sue Hubbell in general and on Ann Zwinger's *Run, River, Run*. Lastly, while I know all of my contemporary authors read Carson's *The Edge of the Sea*, I do not know, with the exception of Zwinger, if they read Carson's other sea essays or to what degree they consciously pulled from her style.

VII.

Tentative Schedule

Initial submitted proposal	November 21, 2015
Proposal return for revision.....	December 21, 2016
Second proposal draft submitted.....	January 21, 2016
Second proposal returned for revision.....	February 21, 2016
Proposal accepted by research advisor.....	March 20, 2016
Thesis director assigned.....	April 1, 2016
First draft completed.....	August 1, 2016
First draft returned for revision.....	September 1, 2016
Revised draft completed.....	October 1, 2016
Thesis director returns revised draft.....	November 1, 2016
Final text submitted to thesis director and research advisor....	January 2, 2017
Thesis Upload.....	February 15, 2017
Graduation.....	March 2017

Works Consulted

- Allister, Mark. "Living the Questions, Writing the Story: Sue Hubbell's A Country Year." *The Midwest Quarterly* 34.4 (Summer 1993): 446. Proquest Web. 7 November 2015.
- At Home on This Earth: Two Centuries of U.S. Women's Nature Writing*. Eds. Lorraine Anderson and Thomas S. Edwards. Hanover: University Press of New England, 2002. Print.
- Bratton, Susan Power. "Thinking Like a Mackerel: Rachel Carson's *Under the Sea-Wind* as a Source for a Trans-Ecotonal Sea Ethic." *Rachel Carson: Legacy and Challenge*. Ed. Lisa H. Sideris and Kathleen Dean Moore. Albany: State University of New York Press. 2008. 79-93. Print.
- Carson, Rachel. *The Edge of the Sea*. 1955. Cambridge: Houghton Mifflin Company, 1998. Print.
- . *Silent Spring*. 1962. New York: Mariner Books. 2002. Print.
- . *Under the Sea-Wind*. 1941. New York: Oxford University Press. 1952. Print.
- Dillard, Annie. *An American Childhood*. New York: Harper Perennial, 1987. Print.
- . *Pilgrim at Tinker Creek*. New York: Perennial Classics, 1998. Print.
- Dobrin, Sidney I. and Christopher J. Keller. "Writing Natural History: An Interview with Ann Zwinger." *Writing Environments*. 289- 312. State University of New York Press, 2005. *Project Muse*. Web. 5 November, 2015.
- Fritzell, Peter A. *Nature Writing and America*. Ames: Iowa State University Press, 1990. Print.
- Gartner, Carol B. *Rachel Carson*. New York: Frederick Ungar Publishing Co., 1983.
- . "When Science Writing Becomes Literary Art: The Success of *Silent Spring*."

- And No Birds Sing: Rhetorical Analyses of Rachel Carson's Silent Spring*. Ed. Craig Waddell. Carbondale: Southern Illinois University Press, 2000. 103-125. Print.
- Hazlett, Maril. "Science and Spirit: Struggles of the Early Rachel Carson." *Rachel Carson: Legacy and Challenge*. Ed. Lisa H. Sideris and Kathleen Dean Moore. Albany: State University of New York Press. 2008. 149-167. Print.
- Hubbell, Sue. *A Country Year: Living the Questions*. New York: Random House, 1986. Print.
- Killingsworth, M. Jimmie, Jacqueline S. Palmer. "Silent Spring and Science Fiction: An Essay in the History and Rhetoric of Narrative." *And No Birds Sing: Rhetorical Analyses of Rachel Carson's Silent Spring*. Ed. Craig Waddell. Carbondale: Southern Illinois University Press, 2000. 174-204. Print.
- Lear, Linda. *Rachel Carson: Witness for Nature*. New York: Henry Hold and Company, 1997. Print.
- Leopold, Aldo. *A Sand County Almanac and Sketches Here and There*. Oxford: Oxford University Press, 1949.
- Lyon, Thomas J. *This Incomparable Land: A Guide to American Nature Writing*. Canada: Milkweed Editions, 2001. Print.
- McCay, Mary A. *Rachel Carson*. New York: Twayne Publishers, 1993. Print.
- McEntyre, Marilyn Chandler. "Sue Hubbell." *American Nature Writers Vol I* Ed. John Elder, New York: Charles Scribner's Sons, 1996. 401-412. Print.
- McIlroy, Gary. "Pilgrim at Tinker Creek and the Burden of Science." *American Literature* 59.1 (1987): 71- 84. *Academic Search Premier*. Web. 3 October 2015.
- Montefiore, Janet. "'The Fact that Possesses my Imagination': Rachel Carson, Science and

- Writing.” *Women: A Cultural Review*, 2001 Spring; 12 (1): 44-56. *MLA International Bibliography* 23 September 2015. Web.
- Musil, Robert K. *Rachel Carson and her Sisters: Extraordinary Women Who Have Shaped America's Environment*. New Brunswick: Rutgers University Press, 2014. Print.
- Norwood, Vera. *Made From This Earth*. Chapel Hill: The University of North Carolina Press, 1993. Print.
- Parrish, Nancy C. *Lee Smith, Annie Dillard, and the Hollins Group: A Genesis of Writers*. Baton Rouge: Louisiana State University Press, 1998. Print.
- Philippon, Daniel J. “Gender, Genus, and Genre: Women, Science, and Nature Writing in Early America.” *Such News of the Land: US Women Nature Writers*. Eds. Thomas S. Edwards and Elizabeth A DeWolfe. University Press of New England. Hanover, 2001. 9-26. Print.
- Rea, Paul W. “An Interview With Ann Zwinger.” University of Northern Colorado *Western American Literature* Vol 24. No. 1 (Spring 1989). 21-36. University of Nebraska Press. Web. JSTOR. 8 October 2015.
- Scheese, Don. “Annie Dillard.” *American Nature Writers Vol I*. Ed. John Elder, New York: Charles Scribner's Sons, 1996. 213-230. Print.
- . *Nature Writing: The Pastoral Impulse in America*. New York: Twayne Publishers, 1996. Print.
- Lisa H. Sideris. “The Ecological Body: Rachel Carson, Silent Spring, and Breast Cancer.” *Rachel Carson: Legacy and Challenge*. Ed. Lisa H. Sideris and Kathleen Dean Moore. Albany: State University of New York Press. 2008. 136-148. Print.
- . “The Secular and Religious Sources of Rachel Carson's Sense of Wonder.”

Rachel Carson: Legacy and Challenge. Ed. Lisa H. Sideris and Kathleen Dean Moore.
Albany: State University of New York Press. 2008. 232-250. Print.

Sisters of the Earth: Women's Prose and Poetry About Nature Ed. Lorraine Anderson. New
York: Vintage Books.1991.

Smith, Linda L. *Annie Dillard* NY: Twayne Publishers 1987

Zwinger, Ann. *Run, River, Run: A Naturalist's Journey Down One of the Great Rivers of the
West*. New York: Harper & Row Publishers, 1975. Print.

---. "Thoreau and Women." *The Thoreau Society Bulletin*, No. 164 (Summer, 1983),
3-7 *JSTOR* 10 October 2015. Web.