Chapter Three

Growing Trust: Ecocritical Animal Studies

Introduction

Ecocriticism, for a long time, has explored the rich and fertile ground of literature and animals and investigated the ways in which humans have impacted other species. The evolution of the human-animal relationship, depicted in literature, has always captivated the attention of ecocritics. Some of the themes that the field engages with are the conflict and cooperation of human-animals in nature, anthropomorphism, companionship, and ownership of animals and animals as symbols. Ecocritics foreground humans' continuous destruction of habitats and other species that are catastrophic for the survival of ecosystems. Ecocriticism studies human relationships to nonhuman species, as these two communities share a common space, the Earth. Both animal studies and ecocriticism try to redefine human relationships with other species. Margo Demello (2012), in Animals and Society: An Introduction to Human-Animal Studies, states that the aim of humananimal studies, which is also known as animal studies or anthrozoology, is to explore the spaces that animals occupy in human social and cultural worlds and the interactions humans have with them (Demello 4). Philip Armstrong and Laurence Simmons (2007) have commented on the common ground that is shared by Animal studies, Ecocriticism, and Environmental studies:

Animal studies obviously has much in common with socio-cultural forms of environmental studies and with ecocriticism, fields that have also gathered a powerful academic and scholarly momentum in recent decades. In many cases the origins, methods and aims of animal studies are shared with those of environmental and ecocritical studies, but ultimately the two paradigms should be considered simultaneously distinct and complementary, especially since each sometimes critiques the other's methodologies, assumptions and findings (Armstrong and Simmons 1).

It is difficult to ignore the magnitude of animal representations in works of literature, art, and popular culture and their actual physical presence in human society. Ecocriticism, in a way, addresses this hiatus by focusing on and understanding the patterns of animal representations in literary works. The human relationship with the nonhuman changes in this present century, and humans' dependence on animals increases, with the changing perceptions of nature and animal in the twentieth and twenty-first centuries. Studying this changing relationship within the context of literature seems important in the increased emphasis on animal advocacy in the world.

The nonhuman species has always occupied a central and significant role in ecocritical thought. Philip Armstrong and Laurence Simmons (2007), in their work *Knowing Animals*, have explored that the multi-disciplinary field of animal studies has provided the researchers of Environmental Humanities an opportunity of examining various aspects of the natural world. Elaborating on the scope of animal studies, they conclude that:

Along with material practices—such as farming, hunting, science, pet keeping and so on—significant modes of this interaction also occur at the levels of art, thought and popular culture. This is because the very idea of the human—the way we understand and experience ourselves as humans—is closely tied up with ideas about animals (Armstrong and Simmons 1).

Though animal studies and ecocriticism often converge, debates related to fundamental differences between these two approaches are highlighted by eminent scholars. Lawrence Buell, Ursula K. Heise, and Karen Thornber (2011), in their article *Literature and Environment*, have explained the fundamental differences between animal studies scholars and ecocritics:

Both areas of study explore ways in which humans' detrimental impact on other species may be diminished. Whereas animal studies scholars tend to focus on the direct violence humans perpetrate on species taxonomically closely related to them, mostly mammals and birds, ecocritics highlight the ways in which human societies systemically, even if unintentionally, damage habitats and species ranging from microorganisms and plants to insects and amphibians (Buell et al. 432).

Ecocritical Animal Studies

Research in ecocriticism tends to centre on the concern for the nonhuman.

Ecocriticism takes 'a nonhuman turn' by examining the human connectedness to animals more than the other parts of nature, which is frequently represented in works of literature and art. The ecocritical scholarship has reflected on human imbrication

with the ecosystem, but often with the focus on the nonhuman, as it is an important component to understand the complexity of nature. This understanding initiates a lived connectedness and engagement with nature. Scott Slovic, while stating the various modes that emerged in the Fourth Wave, advocates the Ecocritical Animal Studies, a mode that "seeks to challenge and complicate human ways of thinking about another species" (Slovic 360-362). The human-nonhuman relationship is one of the key paradigms of ecocriticism. It seeks to address issues related to the coexistence of human and nonhuman species as a part of "our common home" (Waldau 294). Slovic emphasises the deep understanding of this relationship reflected in the literary and cultural texts. This particular mode of Fourth Wave, "Ecocritical Animal Studies", provides the unique intertwining of ecocriticism and animal studies.

Barbara Kingsolver is an eminent novelist, trained biologist, and environmentalist. Close readings of her works focus on the unique aspect that portrays an understanding of the intersections and interactions between the human and the nonhuman. Kingsolver's fiction and non-fiction as literary texts engage the readers' attention with ecological and environmental themes by representing the nonhuman world that includes flora, fauna, landscape, as well as issues related to conservation and the environmental crises. Thus, her creative oeuvre provides an excellent scope of study from the Ecocritical Animal Studies mode.

The Human and Nonhuman Equation in Fiction

Prodigal Summer: "Predators".

Barbara Kingsolver's *Prodigal Summer* (2000) presents the necessity of a humble relationship between human and nonhuman community, which is imperative for understanding and sustaining the ecosystem. In three parallel plots of this fictional work, Kingsolver has portrayed the interconnection and interdependence of human, animal, and other species in a meaningful way that can be studied using an ecocritical lens. This sense of connection is more than a trope and a symbol, thereby inviting reflections on humans intertwining with the ecosystem as a whole. There are three parallel strands in the novel, namely, "Predators", "The Moth Love," and "Old Chestnuts". Seemingly different from each other, the three strands converge to evolve into an interconnected ecological tapestry towards the end. Priscilla Leder (2010), in her article *Contingency, Cultivation, and Choice: The Garden Ethic in Prodigal Summer*, brings out the connection between the fiction's three apparently separate but entwined narratives:

The novel brings to life the Appalachian ecosystem of Zebulon mountain and creates its own system by interweaving three stories of people enmeshed in systems of their own—the ranger who tends the mountain and the hunter who invades it; a chestnut breeder and an apple farmer, aging neighbors who quarrel about propriety and pesticides; and an entomologist struggling to adjust to life as a farmer's widow. All of these characters presume themselves to be solitary in some sense, yet each emerges from solitude as the story unfolds (Leder 232).

These three strands in the novel depict three nonhuman species as characters, namely the coyote, the Luna moth, and the Chestnut tree, whom Kingsolver seeks to bring together. The present study attempts to redefine the human-animal interrelationship in the novel *Prodigal Summer* (2000) with specific reference to the section titled "Predators," as well as the way in which humans have often unintentionally but systemically damaged the nonhuman species. Kingsolver has portrayed the realities of the coyote community and has given an elaborate account of its complex relationship with the human community rather than providing one-dimensional characters representing inherited beliefs about this interconnection and interdependency.

Suzanne W. Jones (2006) claims that in *Prodigal Summer* (2000),

Kingsolver "clearly shows throughout the novel that not understanding the interconnections between the natural and the human world damages the ecosystem" (Jones 88). This is evident in the argument between the characters such as Eddie Bondo and Deanna Wolfe in the plot "Predators", the exchanges between Garnett Walker and Nannie Rawley in the "Old Chestnuts," and in the conservationist attempt of Lusa Landowski in the Widener family farm "The Moth Love".

Kingsolver attempts to apply ecological concepts to throw light on human behaviour and observe interconnection as an important ecological phenomenon.

Barbara Kingsolver's *Prodigal Summer* (2000) ends with the voice of the female coyote, preoccupied in her solitary search in the valley, being watched by a predator in the form of a human being, Eddie Bondo, the bounty hunter. Kingsolver

reverses the equation of the animal-human in her novel, making the predator a prey. The first plot of this novel starts with the lone forest ranger Deanna Wolfe, in her solitary venture in the forest and ends with the female coyote's lone wandering in the same terrain. Kingsolver brings the human-nonhuman relationship into a full circle in this novel. According to Kingsolver, the belief in solitude is a construct of humans; if human beings perceived a way of life where it would be possible to live in consonance with their respective *oikos*, it would perhaps be simpler to realize that we are all only a part of a larger single experience. This organic interrelatedness reminds us that humans are only one species among the numerous species that live in this world. This concept of the profound importance of the interconnection between human beings and the environment is presented as the core concern in *Prodigal Summer* (2000).

In "Predators," Deanna Wolfe, a reclusive wildlife ecologist, and forest ranger, discovers the coyote family that has moved in the ecological niche left by the extinct red wolf, the keystone predator in the forest range of Zebulon County in southern Appalachia. Deanna, while expressing her anxiety for the necessity of the survival of the coyote family, voices Kingsolver's own intimate knowledge of this terrain and concern for maintaining the ecological balance in this bioregion. Deanna describes how the coyote is considered the most hated species in America, and even the US Government is involved in the business of exterminating them using cyanide traps and gunning from helicopters. Mary Louisa Cappelli (2017), in her article *Predator Politics: Coyote Wrenching in Edward Abbey's Desert Solitaire and Barbara Kingsolver's Prodigal Summer*, has pointed out this reality:

The coyote has been an integral predator of North America for hundreds of years; yet, populations fluctuate depending on the politics of the geographical bioregion in which they live. In many instances, coyotes have been slaughtered by U.S. Department of Agriculture (USDA) Wildlife Services, gunned down in predator killing contests, or displaced by land enclosures, urbanization, and environmental degradation (Cappelli 1)

Thus, the coyote is not a predator but also prey. Before humans, wolves were the main predators of coyotes. The red wolf, a native species, faced decimation in the Zebulon forest, and the desperate need for the survival of the coyote is emphasised in the plot repeatedly. Deanna's acceptance of this migrating coyote family, which will help restore balance in the ecosystem, becomes threatened by the arrival of Eddie Bondo, a Wyoming sheep rancher, and hunter who wants to kill the coyotes. Eddie, who works for the *Mountain Empire Bounty Hunters*, manages to hide his intention of wilful extermination of the coyotes from Deanna in the beginning. However, he eventually fails to win Deanna's trust in the process.

She did not ask what might bring a Wyoming sheep rancher to the southern Appalachians at this time of year. She had a bad feeling she knew. A sheep rancher. She knew the hatred of western ranchers toward coyotes; it was famous, maybe the fiercest human-animal vendetta there was. It was bad enough even here on the tamer side of the Mississippi. The farmers she'd grown up among would sooner kill a coyote than learn to pronounce its name... (Kingsolver 28-29).

The situation gets complicated when she is drawn into an affair with Eddie. Kingsolver uses physical desire as a way to bring two ideologically opposite humans together. But she rarely suggests that physical intimacy can bring change in the understanding of an individual. We can see that Eddie hardly accepts any facts from Deanna's thesis on coyotes. She explicitly explains that the breeding and raising of a top carnivore or predator in an ecological pyramid are hard to compare with species from other levels of the pyramid. Despite her insistence on the coyote's and other such predator's imperative role in the ecological pyramid, there is hardly any sign of conversion in Eddie's ideology. Thus the conflict intensifies with time. Ironically the closer they come physically, the further they drift away from each other ideologically. His reaction to discovering the coyote family while roaming the forest with Deanna proves this. Deanna wants to stop the killing of the coyotes. Her deep love and attachment to this species are voiced when she says: "I don't love animals as individuals...I love them as whole species. I feel like they should have the right to persist in their own ways" (Kingsolver 177). She is ready to shoot a cat as it is an invasive species. It is destructive like the chestnut blight and can wreck a habitat: "cats like that don't belong here. They're fake animals, introduced, like the chestnut blight. And just about that destructive" (Kingsolver 175). This incident shows her intense desire to resist the human-induced changes she regards as destructive for an ecosystem. Her saving of the coyote, her readiness to kill a house cat, abandoned by humans, to save the birds, and her compassion in understanding the right of the blacksnake to eat the phoebes in the nest, all of which indicate the need to sustain the balance in the ecosystem, and her deep connectedness to the eco-system.

Deanna's voice resonates with Kingsolver's concern that an imbalance in the ecosystem caused by human activities is a significant cause of environmental problems. The earth as an integrated system cannot exist outside of a symbiotic relational field. Eddie Bondo's crusade against the coyote family acts as a testimony of such imbalance. Kingsolver almost echoes Rachel Carson when she emphasises the limitation of human understanding about their responsibility being the destructive force against nature:

Most people lived so far from it, they thought you could just choose, carnivore or vegetarian, without knowing that the chemicals on grain and cotton killed far more butterflies and bees and bluebirds and whippoorwills than the mortal cost of a steak or a leather jacket. Just clearing the land to grow soybeans and corn had killed about everything on half the world. Every cup of coffee equalled one dead songbird in the jungle somewhere, she'd read (Kingsolver 323).

Interestingly enough, Deanna does not oppose hunting. This is evident when she says, "Predation's a sacrament, culls out the sick and the old, keeps populations from going own roofs. Predation is honourable" (Kingsolver 317). Peter S. Wenz (2003), in his article *Leopold's Novel: The Land Ethic in Barbara Kingsolver's Prodigal Summer*, refers to Aldo Leopold's words in "Thinking Like a Mountain" where Leopold emphasises the fact that wolf extermination harms mountain and eradication of wolves harms an ecosystem. Wenz brings in Leopold's concept of the biotic pyramid and elaborates that "Killing carnivores removes predators of species, such as deer, that tend to overpopulate and harm ecosystems by overeating the plant layer near the base of the pyramid. Thus, Leopold does not object to hunting *per se*,

but he does object to hunting major predators" (Wenz 109). In "Predators", Deanna voices the same concern about the coyotes who have emerged as the keystone predators though they are non-native species in the ecological systems. She makes it clear in her argument which favours the coyotes, explicitly stating her stand on the coyotes as a non-invasive species while conversing with Eddie. Deanna and Eddie's conversation on the coyote's role is significant in the novel. She reflects that to kill a natural predator is wrong. She explains to Eddie that it is a simple calculation that the top carnivore in a biotic pyramid can prevent ecological imbalance. It has a more significant influence on other species. So, the coyote as an exotic species will restore the imbalance in the Zebulon forest ecosystem. Replacing native species with exotics - domesticated species from elsewhere - can also degrade ecosystems, as exotics act both as "channels of [energy] flow or deplete storage" (254). Often the integrity of ecosystems requires restraining the introduction of exotic species. In this case, the coyotes are filling up the place of a top carnivore in the biotic pyramid of the ecosystem. Therefore, they are welcome as exotics. All of these views appear in discussions between Forest employee Deanna Wolfe and hunter Eddie Bondo. Earlier, Deanna opposed hunting, so her eagerness to eat a wild turkey killed surprises, Eddie. Deanna explains that turkey "is a prey fallen prey to us. I can deal with that. Predation's a sacrament, culls out the sick and the old, keeps populations from going own roofs. Predation is honorable" (317). She further explains that it is acceptable to kill a feral cat that has wandered up from some farm and started wrecking nests and killing birds, and having babies in the woods. This approval of predation coheres with Deanna's love of animals, a love that is holistic, not individualistic: "I don't love animals as individuals... I love them as whole species. I feel like they should have the right to persist in their own ways" (317).

Deanna's effort to save and protect the coyote family, Eddie's, and other farmers' acrimonious attitude is shown as a means to make the readers understand the interdependency between the natural and human world. The conflict between Deanna as a protector and Eddie as an enemy is expressed by Kingsolver in this novel. Kingsolver's characters are connected with the ecosystem they live in, acting both as predator and prey. Suzanne W. Jones (2006) states in *The Southern Family* Farm as Endangered Species: Possibilities for Survival in Barbara Kingsolver's Prodigal Summer has stated that "Kingsolver's greatest success in this novel is in helping readers to see the human and nonhuman interdependencies in an ecosystem" (Jones 92). At the same time, Kingsolver points out the possibility of anthropocentric actions, of which Eddie Bondo is a fine example. Nannie Rawley, one of the characters from "Moth Love" of *Prodigal Summer* (2000), echoes the 'biocentric' perspective of every living creature of this planet, which is holistic and evidences the mutual coexistence of biota and abiota: "I do believe humankind holds a special place in the world. It's the same place held by a mockingbird, in his opinion, and a salamander in whatever he has that resembles a mind of his own. Every creature alive believes this: The center of everything is me" (Kingsolver 215).

At the end of the novel, we find Eddie disappearing from Deanna's life after three months of courtship. Nowhere does Kingsolver hint that his close association with Deanna and sharing her views of perceiving one's world ecologically have altered Eddie's ideological thinking of ecology. But he leaves Deanna and the coyotes alone. If that implies any conversion, then Eddie Bondo has really been transformed:

She'd wondered for most of the day whether he meant her, Deanna, or the untouchable coyotes. Which one of them had been too much for Eddie Bondo?... *Meeting his match* was a considerable concession. He was leaving them both alone, Deanna and the coyotes. No harm would come to anything on this mountain because of him (Kingsolver 433).

In the final chapter, we see Eddie Bondo watching the coyote devoid of cruel intentions just as he watched Deanna in the opening chapter. The last chapter of the novel is written from the standpoint of the female coyote, a solitary figure on the landscape. The movements of the female coyote are similar to that of Deanna. Kingsolver succeeds in describing her without giving any human attributes to the animal. She voices both the human and the animal and presents the perspective and concern for the sustainability of an ecosystem and our planet. Kingsolver brings the human-animal equation to fruition. The image of the coyote culminates into an important trope in the novel to represent the old lessons of nature. Kingsolver spells out this lesson of never being alone but connected to the rest of nature. To conclude, in Kingsolver's words: "There's no such thing as *alone*. That animal was going to do something important in its time—eat a lot of things or be eaten. There's all these connected things you're about to blow a hole in. They can't all be your enemy, because one of those connected things is you" (Kingsolver 320). Kingsolver's greatest success in this novel is in helping readers to see the human and nonhuman interdependencies in an ecosystem. Kingsolver has said that this is the most challenging book she's ever given to her readers. The one whose complexity, she believes, some reviewers have missed by focusing too much on the humans and not enough on the flora and fauna. Kingsolver understands the tendency of any species

to be self-centred and attempts to reach those readers who persist in anthropocentric thinking.

The Human and Nonhuman Equation in Non-fiction

Pricilla Leder (2010) comments about the unique perspective of Kingsolver's non-fiction: "Kingsolver's non-fiction addresses a subject that is indeed vital: human relationship to nonhuman nature. Her literary inscriptions are successful not only because of her artistic sensibilities but also because of her empirical skills of perception as a trained evolutionary biologist" (5). Her non-fiction not only articulates an increasing awareness about our present state of environmental crises but also "to reacquaint human life" with nature and nonhuman life that that "sustain and nurture it" (Leder 214-215).

Small Wonder: "Seeing Scarlet" and "Setting Free the Crabs"

"Seeing Scarlet" documents her destination in the Corcovado National Park on the Osa Peninsula, a biologically rich and protected home of the Central American population of a globally endangered bird species called the Scarlet macaws. With sparse human settlements, Osa provides a park that is perhaps the richest in its biodiversity, with 400 avian species and 140 mammals.

Scott Anderson, in his study *Dependent Environmentalism: A Case Study of Oreros and the Corcovado National Park in Costa Rica* (2003), has vividly described the gold rush history in the Osa Peninsula. Costa Rica, like all of Central

America, has various environmental and economic problems, such as loss of remaining forest due to deforestation, soil degradation, rapid population growth, inflation, high unemployment, the dedication of the country's most productive land to export, and ranching (Anderson 23). The competition to excavate the land for gold adds to these problems. This has definitely affected the environment in the long run, making them endemic nonhuman species populations vulnerable to natural or human-induced threats. Like gold, the exquisite nonhuman species of the land lure wildlife traders and traffickers. Stories of endangered and captive species record the decimation of the rich biodiversity of the rainforest habitats. Environmentalists or activists have not yet documented many such stories. The essay narrates Kingsolver's journey in Costa Rica as a biologist who has "increasingly turned our attention toward the preservation of biodiversity" and in search of the natural habitat of Ara macaw "a scarlet macaw: a fierce, full meter of royal red naked white face, a beak that takes no prisoners" (Kingsolver 50-51). Kingsolver's emphasise on the term "prisoner" is important because this rare avian species is found mostly in captivity and is declining rapidly because of habitat loss, direct hunting, and capture for the pet trade. Her concern is about the conservationists' effort to curb the poachers annihilating a "national emblem": "Many conservationists feel that their best hope is to introduce alternative sources of income for the poachers while educating their children about poaching's long-term trade-offs". Kingsolver, through her education campaigns in schools, trains children to refrain from stealing baby parrots and macaws from their nest holes. Reordering children's attitudes toward threatened species may eventually influence their families.

In the *Last Stand: America's Virgin Lands* (2002), Kingsolver talks about the greatest folly of the human species, the fact that they think they own the planet. This concept of ownership is completely human. This concept is also the primary cause behind the human displacement of other species. Kingsolver envisions the life of other species without any human interference. She advocates that the nonhumans do not need humans to fulfill their needs: "What would a raven care, really, if we were all to remove ourselves tomorrow to some other planet? Most likely, he'd be relieved. He does not need us" (Kingsolver 15). The final section of "Seeing Scarlet" echoes a similar perspective. The scarlet macaws are completely oblivious of human presence in their nesting, "the way they perched and foraged and spoke among themselves, without a care for a human's expectations" (Kingsolver 50).

"Setting Free the Crabs" also echoes similar "defiant survival" of the nonhuman. Humans expect that the welfare and survival of nonhuman species depend on them: "The center of everything is *me*" (Kingsolver 215). But the nonhumans survive without care for any such human expectations. Kingsolver harps on the debate on the human notion of animal welfare that often focuses on ethical issues of *good well-being* and the *bad well-being* of nonhuman species. Kingsolver records her very human maternal instinct about the well-being of hermit crabs that her daughter collected from the Sanibel Islands: "There is the sort I think of as maternal—both selfless and wholly giving—the point of which is to help some other life do as well as possible even outside your presence, and hopefully to survive beyond you" (Kingsolver 63). The hermit crabs, like the scarlet macaws, survive, oblivious to any such helpful human notions. This pulsating life, facing the threat of extermination, places humans with a choice to reconfigure their relations with the

nonhumans: "Decisions about biodiversity are in the end questions about value, about cultural frameworks of thought, and about historical traditions of social practice" (Heise 233). This value, culture, and tradition are what Kingsolver wants to impart to her children, so they understand the worth of their inheritance. "Setting Free the Crabs" is about Kingsolver's determination to teach her children the human-nonhuman equation and interdependency and to respect it. This is the legacy she has inherited and strives to pass it on: "I have tried to teach my children to love nature as my parents taught that reverence to me—through example, proximity, and plenty of field guides and age-appropriate biology books" (Kingsolver 62).

Quoting Al Gore's *Earth in Balance*, Kingsolver encapsulates the human efforts of 'othering the nonhuman' with a long history of domination of animal species, which exist only for our use. This attitude has gone through changes, but at the cost of "losses at our peril" (qtd in Kingsolver 67). Our planet is facing a wave of mass extinction that is happening quickly, and the major causes of this are mass slaughter, habitat loss, agriculture, mining, human overpopulation, urbanization, etc. Kingsolver talks about the rapidity of persistent anthropogenic activities that seals the fate of several species. She refers to the prevailing theory on the extinction of large Ice Age mammals in North America who simply became food for humans and therefore extinct. Edward O. Wilson in *Diversity of Life* (1992) has postulated that the extinction of large mammals and flightless birds coincided closely with the arrival of humans in North America, Madagascar, and New Zealand, and less decisively earlier in Australia. In Africa, where humans and animals evolved together for millions of years, the damage was less severe (Wilson 261).

Kingsolver's words are deeply critical of the effects of the various aspects of human

actions that witness the human's changed relationship with nonhumans. She regrets that there is hardly any act of human beings that is not fraught with less immediate self-interest. But this 'less immediate self-interest' should be related to environmental stewardship: "The first steps toward stewardship are awareness, appreciation, and the selfish desire to have the things around for our kids to see. Presumably, the *unselfish* motives will follow as we wise up" (Wilson 98). As a biologist and scientist, she emphasises the immediacy of *unselfish* and *wise* environmental stewardship. She almost echoes Edward O. Wilson in *Diversity of Life* (1992), where he discusses the need for environmental stewardship to curb the species which are vanishing rapidly. Pricilla Leder (2010) in *Seeds of Change* has echoed the same concern about the human species being "wise up" to choose between "immediate self-interest" and "unselfish motives":

We must choose between short-term economic stability and long-term environmental sustainability. This binary thinking brings environmental activism to a standstill because it perpetuates false divisions of human sustenance. What we cannot afford, it turns out, is to understand the earth's wellness as separate from the economic decisions that place the short-term interests of human markets over long-term interests of biological health (Leder 219).

High Tide in Tucson: "High Tide in Tucson" and "Making Peace"

Buster, the hermit crab in "High Tide in Tucson", crystalizes Kingsolver's concern about the humans ignoring the issues related to the displacement of native

nonhuman inhabitants in an ecosystem. This leads to the categorical separation of humans from nature as they fail to realize the grave consequences of *species* displacement (emphasis is mine). She describes Buster's plight in vivid detail: "Who could blame this creature? It had fallen asleep to the sound of the Caribbean tide and awakened on a coffee table in Tucson, Arizona, where the nearest standing water source of any real account was the municipal sewage-treatment plant" (Kingsolver 2). Her thoughts repeat the crisis of being displaced: "I feel remorse about Buster's monumental relocation; it's a weighty responsibility to have thrown someone else's life into permanent chaos" (Kingsolver 15). Kingsolver stresses the fact that human activities threaten the ecological systems by displacing the native nonhuman species. The inability to see the basic difference between 'want' and 'need' is the root cause of all environmental crises. The 'wants' have prompted humanity's previous action sand will direct its future choices and pushing the earth into terra incognita (Clark 1) is the result of these human-centered choices: "Want is a thing that unfurls unbidden like fungus, opening large upon itself, stopless, filling the sky. But *needs*, from one day to the next, are few enough to fit in a bucket, with room enough left to rattle like brittlebush in a dry wind" (Kingsolver 13). Human 'want' is the new extinctionpromoting (emphasis is mine) term that makes humans oblivious of the fact that they are also animals. Kingsolver states that only full realization about human and nature can actualize the human-animal interrelation. She echoes E. O. Wilson (2005) that humanity is a species that evolved among other species and is a part of nature and the biosphere. The more closely humans identify themselves with the rest of life, the more quickly they can discover the sources of human sensibility (Wilson 203).

Kingsolver explores the essential animal-nature in every human being that correlates with nonhuman species. This interconnection promotes a better understanding of ecological liaison among all species. She urges the need to negate the most "debatable tradition of Western civilization" (Kingsolver 3) that denies humans are animals. It promotes to set humans apart as landlords of the Garden of Eden and exempt them from the natural order, and they are entitled to hold dominion over the whole planetary ecosystem. She attacks this purposeful deviation that is misleading and distinguishing humans from the entire animal community and altering the essence of environmental stewardship. Here, Kingsolver echoes Lynn White Jr. in "The Historical Roots of our Ecological Crisis" (1996) that the root of our ecological crises lies in the Judeo-Christian belief that humans are given dominion over the earth, and they can subdue nature because "man shares, in a great measure, God's transcendence of nature" (White Jr. 10). But, finally, when the human-animals have managed to behave like so-called animals anyway, they have already managed to wreck the whole biosphere, "most of what took three billion years to assemble" (Kingsolver 10).

Kingsolver states that the only way to escape these present ecological crises is to adhere to the true spirit of stewardship, which is to reclaim our membership in the animal world. Humans have to refrain from adopting the *less-than-careful* (emphasis is mine) use of the environment while redefining their relationship with nonhumans. The essence of stewardship claims "the recognition of our collective responsibility to retain the quality and abundance of our land, air, water and biodiversity, and to manage this natural capital in a way that conserves all of its values, be they environmental, economic, social or cultural" (Centre for

Environmental Stewardship and Conservation, Inc. 15). This *less-than-careful* interaction ignores "our collective responsibility" and explains the harms created by anthropogenic activities. Kingsolver echoes Rachel Carson as she states the changing ecological scenario:

Air, water, earth, and fire—so much of our own element so vastly contaminated, we endanger our own future. Apparently, we never owned the place after all. Like every other animal, we're locked into our niche: the mercury in the ocean, the pesticides on the soybean fields, all come home to our breastfed babies. In the silent spring, we are learning it's easier to escape from a chain gang than a food chain. Possibly we will have the sense to begin a new century by renewing our membership in the Animal Kingdom (Kingsolver 10).

Kingsolver in "Making Peace" returns to a similar context of ownership and dominion over nature but in a very different tone: "Ownership is an entirely human construct. At some point, people got along without it. Many theorists have addressed the question of how private property came about, and some have gone so far as to suggest this artificial notion has led us into a mess of trouble" (Kingsolver 26). She refers back to the concept of 'need' and 'want' as she states that human being is used to own more than they want. This concept of 'want' preceding over need is the root of the concept of 'ownership'. It is the product of modern imagination: "But to own land, plants, other animals, more stuff than we need—that is the peculiar product of a modern imagination" (Kingsolver 26). Kingsolver progresses with the historical and religious origin of concepts like 'ownership',

'territoriality' and 'creating niche'. She connects them with the context of extinction and displacement of animals forced by human presence and impact exactly the similar way Buster, the hermit crab, is displaced from its natural habitat. Alteration and abandonment of natural habitats and displacement of animals due to human intervention cause large-scale species decimation. These are reflected in her non-fictional texts of extinction, representing the human's history of modernization and his changing relationship with his companion species. She urges the need for a new motif of human species assuring the solidarity between human and nonhuman species.

Conclusion

Kingsolver describes the current extinction crises and the fate of vanishing endangered species in the context of the human-animal equation. This equation faces an imbalance because of anthropogenic activities, and the beginning of the Sixth Mass Extinction, a kind of 'species cleansing' (Flores 115). Her non-fiction can serve as "a cautionary tale," a term that Ursula Heise employs in her work *Imagining Extinction* (2016). But despite the warning and constant reiteration by writers and scientists alike, the concern remains as to what affirmative visions of the future these cautionary tales can collectively offer. Kingsolver talks about raising "family conscience" to curb the rampant trapping, poaching, and smuggling, i.e., the mass slaughter of endangered nonhumans. She questions the new paradigms that all of these cautionary tales conceptualize and reflect the relationship between human and the nonhuman.

Ecocriticism takes 'a nonhuman turn' by examining the human connectedness to multiple species, which is frequently represented in a wide range of fictional and nonfictional texts. "Nature oriented literature" (Murphy 263) continue to focus on the fact that humans are not separate or exceptional but integral to the natural order of things. Scholars have become aware of the environmental crises, overconsumption of natural resources, species decline, and other issues about the physical environment that arise out of the contesting idea of anthropocentrism. They wonder how literary and cultural texts offer an alternative perspective to reconceive nature conservation to ward off the dangers related to the "end of nature" (Heise 8). Ursula K. Heise (2016) raises questions related to human engagement with endangered species in *Imagining* Extinction: The Cultural Meanings of Endangered Species, "... why species go extinct, how we know what endangers them, why we care about some endangered species and not others, and what means we choose to express our concern" (Heise 13). Barbara Kingsolver's works can be considered as "cautionary tales", both her fiction and non-fiction, which attempt to answer these specific questions. They highlight the larger crises and endangerment of the human relation to nature and nonhuman species. Kingsolver interweaves many 'tales' to represent an answer: the changed equation between the predator and the prey in her novel; the reclusive wildlife ranger's conservationist efforts to save the prey, the endangered species of coyotes; Kingsolver's emotional entanglement with her pet hermit crab Buster who is an outlaw against nature; the reality that every nonhuman species has intrinsic value as a part of the ecosystem; the crucial domestic labour of a planet, the grunt work that keeps everything else alive: soil microbes, keystone predators, marine invertebrates, exotic avian species, pollinating insects, and phytoplankton (Kingsolver 68). The answer frames the truth of human's perception, their relation with animal species and contributes to the changing narratives of nature's decline due to anthropogenic activities.