Good afternoon, my name is Janel Houton and it is a pleasure to be here to talk about my art exhibit. Thank you so much to Merrimack College, the Library and CJ Wong in particular for offering me the opportunity to be here.

I would like to start with two passages, the first from "Love Letter to the Earth", by the Buddhist teacher Thich Nhat Hanh.

"The Earth Is a Wonder

When you contemplate the planet Earth, you see that she has many virtues. The first virtue is stability. She is steadfast when faced with challenges and continues to offer perseverance, equanimity, and forbearance in the face of many human-created calamities.

The second virtue is that of creativity. The Earth is an inexhaustible source of creativity. She has given birth to so many beautiful species, including

humans. Although there are many talented musicians and composers among us, the most wonderful music of all is composed by the Earth herself. There are those of us who are excellent artists and painters. But the Earth has created the most beautiful landscapes. If we look deeply, we can discover a multitude of the infinite wonders that appear on the Earth. Even the best scientist can't match the beautiful petal of a cherry blossom of the delicateness of an orchid.

The third virtue is nondiscrimination. Nondiscrimination means that the Earth does not judge. We humans have done many careless things that have harmed the Earth and yet she does not punish us. She brings us to life and she welcomes us back to her when we die.

If you look deeply and feel this connection to the Earth, you will also begin to feel admiration, love, and respect. When you realize the earth is so much more than simply the environment, you will be moved to protect her as you would yourself. There is no difference between you and her. In that kind of communion, you no longer feel alienated."

The next passage is from Pope Francis's "Encyclical on Climate Change & Inequality: On Care for Our Common Home".

"The Universe as a whole, in all its manifold relationships, shows forth the inexhaustible riches of God. Saint Thomas Aquinas wisely noted that multiplicity and variety "come from the intention of the first agent" who willed that "what was wanting to one in the representation of the divine goodness might be supplied by another", inasmuch as God's goodness "could not be represented fittingly by any one creature". Hence we need to grasp the variety of things in the multiple relationships. We understand better the importance and meaning of each creature if we contemplate it within the entirety of God's plan. As the Catechism teaches: "God wills the interdependence of creatures. The sun and the moon, the cedar and the little flower, the eagle and the sparrow: the spectacle of their countless diversities and inequalities tells us that no creature is self-sufficient.

Creatures exist only in dependence on each other, to complete each other, in the service of each other."

These two profound and beautiful passages from two of the contemporary world's most important religious leaders and earth advocates provide the context of the critical environmental times we find ourselves in today. I'd like to talk about these ideas, including Catholic environmentalism, as well as some of my background and experiences that led me to start my environmental series of art. While I have a background in Art History, Historic Preservation, and Japanese Art, and healthcare, I started to focus on art in 2008, and within a few years of working on varied subject matter, I found I was primarily interested in themes of nature. If you look at my work as a whole now you can see a number of threads that I return to, however the theme that I've presented here- specifically my work that combines imagery and text, started after reading an article published in March of 2015 in the Boston Globe, titled "Native Plants face significant Threat", which is hung as part of my exhibit. The article starts, and I

"In all, 22 percent of all native plant species in New England are now either extinct, rare, or in a state of decline, strangled by invasive vines, trampled by incautious hikers, or drowned by man-made dams, according to a landmark report released Thursday by the <u>New England Wild Flower</u> <u>Society</u>.

The report also found that nearly a third of all the region's plants are from elsewhere, and an increasing number are considered invasive, which means they are harmful to native flora."

The article continues to describe current and potential scenarios for native plants, including the Sugar Maple, a tree iconic to New England that I love, and have painted a number of times.

Reading the Boston Globe article I was probably most shocked by the scenario posed that temperature changes brought on by climate change, within the next hundred years, are likely to lead these brilliant trees in the region to experience a massive die-off. As an artist, and resident of New England you cannot live here without being aware of the associations of the region with Autumn. This image of New England, is well known afar, and when I lived in Japan, when I told people I was from New England people often would comment on our brilliant foliage.

As we acknowledge this association and love for fall that is so well known, we can also consider how much fall is celebrated, how it inspires all kinds of arts, cooking, traditions, travel, resulting in an intangible cultural impact as well as a significant economic one.

Reading the article, the realization that this is one of many likely and dire possibilities for our environment, was a revelation to me, threatening with the very definition of New England culturally and historically.

Reading it I wondered how this isn't a headline in the news on a regular basis, while at the same time realizing that while we do hear news about climate change and environmental threats, that without looking at and considering precisely what is at stake- which the reality is is that which is in our backyards, as well as the foods we eat to live which must be mentioned-, that we become vulnerable to a disconnect about the facts, as well as the factors in our daily lives that impact these conditions. Having done a number of paintings based on fall, I felt like I had to say more in my art, and say it literally. It almost felt dishonest not to address it. So I started using text from articles and research about environmental scenarios and climate change, with my subject matter, to promote more awareness - hoping that people might make a conscious connection to the consequences of climate change, environmental threats and neglect. At this stage, I started to read about native species in decline in New England, working from the Boston Globe article and the Massachusetts List of Endangered, Threatened and Special Concern Species. For each identified species on this list the Massachusetts Division of Fisheries & Wildlife has created information sheets with descriptions, illustrations, maps, habitat, threats, and suggestions for conservation. You can find all of this online and it's quite interesting to see what is threatened, where it is found within the state, the background and context. Some of the species do not have information sheets, so from what I've seen this is a work in progress, and also some have more information than others.

I am learning about these things, and am by no means a specialist in this regard, but learning as I work.

I often think, and this is true of problems in general in life, that a distressing topic can be extremely overwhelming to even consider, and that sometimes when people are faced with situations that seem so dire, it can cause them to back away and not even engage with what is happening. Raised Catholic but now a student of Tibetan Buddhism, as a young adult and college student I was quite moved in my study of the Great Books by the readings of St Augustine, and in my own readings of the Benedictine Monk Thomas Merton, along with Kentucky writer and activist Wendell Berry, whose ideas now seem so prescient to addressing the larger questions and challenges the world faces today. In recent years I have found a lot of additional inspiration from Buddhist teachings as well; one basic Buddhist idea is that we as individuals are not solely responsible for fixing all of the problems of the world, however we can work to create important change through working on ourselves and recognizing our interconnectedness with all of existence, and by recognizing and taking on

the work which lies at every opportunity of our daily lives, however we may be engaged with society, or however we may be serving. There's also a Buddhist idea of considering the possibility that every being you encounter may have been in a past life, your mother (or father). [I don't think you need to say this.].

More recently I have been deeply moved by Pope Francis's Encyclical on Climate Change & Inequality. It is an extraordinary document on many levels within Catholicism and beyond, and I will return to discuss it more, shortly.

Getting back to the context of my subject matter, to consider the environment of New England and the Americas we must recall the relationship of Indigenous Americans which was and is closer to other indigenous cultures and in conflict with the European immigrants culture who settled here. There's a wonderful book that I first read about 22 years ago when I was a graduate student studying Historic Preservation, called Changes in the Land: Indians, Colonists and the Ecology of New England by William Cronon. The book describes New England's ecology before and as European Colonists arrived, and it's amazing to get a mental picture of what New England looked like from the 16th century on, as well to see not only how colonists related to the environment in contrast to Native Americans, but also the differences between tribes themselves and how they worked and lived within their environments. There were significant differences between northern and southern tribes in New England in how they lived, farmed or hunted, which had a large impact on population numbers, with Northern Indians living more as hunters, and having lower populations. The environment was already impacted by Native tactics of using fire to clear lands and forests for different needs including hunting. At the same time we get a picture of the incredible abundance of wild and sea life here- from descriptions of beaches offering a bounty of sea life, including a description in 1634 from English writer William Wood in "New England's Prospect" where he described observing in his travels of southern New England, individual oysters as big as a foot long, with the

movement of tides bringing thousands of lobsters into shallow waters, and an infinite store of mussels and other shellfish, as well as clams "as big as a penny white loaf" of English bread and strawberries that grew 2" in diameter. As we continue to read we see how the region's resources were considered otherworldly and quickly exploited for many uses abroad, with the tallest trees taken away and abroad for mast building on ships, furs used for clothing, sassafras for curing syphillis, as a few examples. I mention this as a precursor and beginning of what led us to where we find ourselves now in New England, and the environmental losses we face today.

I don't intend to trace the history of American development but wished to present a context from a book which made a powerful impression on me, some years ago, about environmental change, historical context and the Native Americans who lived and saw the earth and the use of it, in a very different way from what I was familiar with. One dramatically different view was around the ownership of land - the Native Americans of New England did not see land as a commodity, and considered use of it as temporary and doing so would use or lend land (which is what they believed they were doing initially with Colonists), expecting for its return, and also believing in only the use of that which is needed, through harvest and hunting, with conscious recognition of the need for the earth, wildlife, and nature to be left well enough, in order to be able to reproduce for following cycles. I think as we look at the crises we face now it is very important to consider historically that the way humans have engaged with the earth has not only been a Western Capitalistic way of seeing the earth in commercial terms, of simply resources to be used up or exploited. Indigenous peoples have largely lived with a conscious understanding of delicate earth cycles, and the absolute necessity of understanding and respected those cycles as necessary for human beings' very survival. Reflecting on these traditional ways can help us to reconsider how we can relate to the earth, to work with it, and make our lives increasingly sustainable-something which is happening throughout the world now, and which is incredibly positive, providing all kinds of inventive possibilities for thinking, doing and creating.

Let's go back to the art. I'd like to go over a few of my works and fill you in on some of these beings who need our support and attention now. The Massachusetts List of Endangered Threatened and special concern species is described officially as follows:

Massachusetts has a rich biological legacy and is home to a wide array of plants and animals. Some of these species are unique to our state, others have their largest, most stable populations here, and yet others are still relatively common. Of these native species, there are 176 species of vertebrate and invertebrate animals and 256 species of plants that are officially listed as Endangered, Threatened or of Special Concern in Massachusetts and tracked by the <u>Natural Heritage and Endangered</u> <u>Species Program</u>. These are species considered to be at risk, or potentially at risk, of extirpation from Massachusetts, or at risk of global extinction. The three <u>main criteria used to assess extinction risk</u> are rarity in the state, population trend, and overall threat.

The Massachusetts Endangered Species Act (MESA) was enacted in

December 1990. It protects rare species and their habitats by prohibiting the "take" of any plant or animal species listed as endangered, threatened or special concern by the MASS division of fisheries and wildlife. "Take" is defined as, in reference to animals to harass, harm, pursue, hunt, shoot, hound, kill, trap, capture, collect, process, disrupt the nesting, breeding, feeding or migratory activity or attempt to engage in any such conduct, or to assist such conduct and in reference to plants to collect, pick, kill, transplant, cut or process to attempt to engage or to assist in any such conduct. Disruption of nesting, breeding, feeding or migratory activity may result from, but is not limited to , modification, degradation or destruction of Habitat.

For endangered Massachusetts species there are 11 Mammals, 11 Birds, 8 Reptiles, 0 amphibians, 4 fish, 31 Invertebrates, 154 plants for a total of 219. there There arewhile 104 threatened species are considered "threatened", 109 and 109 in the last category," special concern" species and 432 total . I'd like to share some background about a few of the species I have chosen. All of this information that follows is from the Mass Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program website.

But before I describe some specific examples I'd like to say a few things from the practical art making of these works. Other than my drawings, these are works using acrylic paints, on standard canvas and linen canvas (which I what I generally prefer to paint on) I combine sources as models for my work- as much as possible I try to work from my own observation, study, photographs, but it is not always possible. For example for my dragonfly painting I used a series of different photos to come up with the main central, figure and surrounding dragonfly figures. I used different photographs of coastal wetlands to come up with my own composition. I worked with brushes and palette tools. Lately I start with a basic outline in charcoal, then paint, I generally like to layer dark values first and then build on that for a textured effect. Also for the dragonflies I used some metallic paints. Most of my work is organic in the sense that I work from an initial composition and then experiment until I feel the piece comes into its full expression. Some artists plan it all out, with graphs, full color sketches, etc. I do more prep work with trickier compositions but usually I like to see where the work takes me. It often ends up somewhere different than I anticipated, and most of that time- not all, it works for me. And when it doesn't, I simply paint over it!

## **Endangered Dragonflies**

While I did not put the name of this creature on the painting, it is a representation of the Ebony Boghaunter, Dragonfly, which is Endangered, as are a fair number of dragon and damselflies. I painted its features as I found discovered through descriptions and photographs, within a setting it might be found, wetlands. While artistically, I work in a variety of styles, some more realistic than others, for this project I have approached depicted my figures it with some a sense of childlike imagination about the creatures, and then trying to give a sense of wonder that children feel as they learn about the world .[run-on sentence here] These dragonflies average from 1.2 to 1.5 inches, males are slightly larger than females. There are similar looking species that it can get mixed up with. Its habitats include bogs, swampy northern wetlands, typically next to coniferous or mixed woodlands. The lifecycle is described as "poorly known". They have been found from the northern midwestMidwest, and Canada, and New York. The primary threat is habitat destruction through physical alteration or pollution. Insecticides in particular are threats.

## Barrens Tiger Beetle

The Barrens Tiger is a predatory beetle, 12 - 14 mm in length, they are so named because of their tiger- like behavior of chasing down and capturing prey with their long mandibles. In Massachusetts the BTB is found in sparsely vegetated openings in pitch pine scrub oak barrens. It requires patches of bare sand to forage and mate, where they it constructs burrows and captures prey. It has a two year life cycle. Populations are rare, It but it is found from southern NH to northern Georgia, west to Minnesota, and populations are rare, in MASS Massachusetts there is only one known population. Threats include habitat loss, off road vehicles, fire suppression chemicals for fire suppression, invasion by exotic plants, and insecticide spraying.

I mentioned I work in healthcare, if you or your families use pesticides and insecticides on a regular basis, I would plead you to scale back and find alternatives, they so dramatically harm all life, including human health. The Upland Sandpiper

The Upland Sandpiper stands about 12 inches tall with a wingspan of <u>18</u>-<u>to 27 inches.</u> Calls include a rapid "quip-ip-ip-ip" alarm call and a long drawn out courtship call which has been described as a windy, whistle "whiip-whee-ee-oo". The sexes appear similar. The birds inhabit large expanses of open grassy uplands, wet meadows, old fields and pastures. In Massachusetts it is restricted to open expanses adjacent to runways and taxiways of airports and military bases, and they need feeding and loafing areas as well as nesting areas. TheyThe birds winter in similar landscapes in South America, particularly on the <u>pampas</u> of northern Argentina and Uruguay.. They breed from Maine to Central Canada and Alaska, Maryland to Oklahoma and Colorado. European settlement created extensive nesting habitat through the clearing of forests for agriculture and grazing, and the bird was common in the 1850s and at that time was seen in the thousands. Commercial shooting for food reduced its numbers dramatically, and currently after having been protected from hunting for over 60 years, it is threatened by loss of habitat to development and succession of open lands to forest. It is experiencing population decline over much of its range, particularly in the Midwest and eastern United States. In 1985, a total of 25 to 27 breeding pairs nested at only 7 sites in Massachusetts.

## Bog Turtle

The Bog turtle is a small turtle, 3 - 4 inches long. The species can be confused with the Spotted Turtle, which is slightly larger and has yellow spots which the bog turtle does not have. Massachusetts populations are the northern periphery of the turtle's range, which extends from Berkshire county, through Western Connecticut, Southern New York, New Jersey and eastern Pennsylvania, and southward in the Appalachian mountains to Georgia. In Massachusetts they inhabit low lying open calcareous wetlands, notably fens. It is a secretive turtle, an opportunistic omnivore foraging on land and underwater. They are thought to live 60 or more years. They have always been uncommon in our state and are particularly vulnerable to habitat loss and degradation because they are a sedentary species in comparison to other turtles. The primary cause of adult mortality are predation, farming equipment, habitat destruction, collection, invasive wetland plants, and natural hydrology changes.

## Purple Milkweed

The PM is a herbaceous perennial of open sparsely vegetated woodlands and boarders. It can be found in much of the eastern half of the United States as far west as South Dakota and Texas. It also occurs in Southern Ontario. Despite the wide range, the number of populations are very low in all areas, except Iowa, Michigan, New Jersey, and New York. Purple Milkweed is usually found on dry, fairly open road banks in and in drier oak pine woods and woodland borders, however it can also be found along scrubby lake shores and in vernal pools. Historically the plant was found in all but 2 Massachusetts counties but current populations are only known in Barnstable and Hampshire counties.

Monarch butterflies cannot survive without milkweed; their caterpillars only eat milkweed pants, and they need them to lay their eggs. If you have a chance please consider planting milkweed to support the butterfly populations and their migration, they also provide valuable nectar to a diverse suite of bees and other butterflies.

So obviously these are just a few of the works from the lists, I do plan on continuing the series, as I continue to work on the series, there's plenty of subject matter there, my hope to is to share the information, and to make a connection for people to their environment. There are a variety of causes that I have mentioned here that have impacted all of these creatures facing endangerment, and climate change relates to much of this, and brings a host of many other challenges for native species everywhere. Climate change is happening, and sadly, people who have done the least to cause it will be first to experience the worst consequences. Quoting a UN report:

"People who are socially, economically, culturally, politically, institutionally or otherwise marginalized are especially vulnerable to climate change," One impact is through the reduction in crop yields, which leads to higher prices. "As time goes on the poor countries that are in the warmer and drier parts of the planet will feel the crop yield decreases early," quoting Michael Oppenheimer, professor of geosciences and international affairs at Princeton University. "When you get above two degrees and into the three- and four-degree range, adaptation becomes less effective and even some of the wealthy countries that have advanced agriculture start suffering."

"People who were already disadvantaged, more of them are going to be suffering from malnutrition," he added. This is a good point to return to Catholic Environmentalism. While certainly historically there is nothing comparable to the reach of Pope Francis's encyclical today, the Catholic church has in fact a strong tradition of environmentalism. In recent decades as people have become increasingly aware of ecological issues, previous and recent papacies were active and outspoken on the subject, in particular: Pope Benedict 16<sup>th</sup> XVI and Pope John the 13<sup>th</sup> XXIII, Pope Paul 6<sup>th</sup> VI, John Paul 2<sup>nd</sup> II, as well as Franciscan orders. For the church environmental issues naturally have been considered through a moral lens. The most famous patron saint of animals and ecologists, St. Francis of Assisi, Pope Francis's namesake, is generally considered the original Catholic environmentalist, whom Pope Francis pays homage to in naming his Encyclical "Laudato Si" (pronunciation) "Praised Praised Be", which is taken from the "Canticle of Creatures" written in 1225 by St. Francis. St. Francis is popularly known for his love of animals and the earth, and a his particular affinity to birds, who he is remembered to have preached to! St. Francis was made the

patron saint of ecologists by Pope John Paul II in 1979.

Pope Francis quotes the beautiful Hymn of St. Francis of Assisi in his Encyclical:

Praised be you, my Lord, with all your creatures,

especially Sir Brother Sun,

who is the day and through whom you give us light.

And he is beautiful and radiant with great splendor;

and bears a likeness of you, Most High.

Praised be you, my Lord, through Sister Moon and the stars,

in heaven you formed them clear and precious and beautiful.

Praised be you, my Lord, through Brother Wind,

and through the air, cloudy and serene, and every kind of weather

through whom you give sustenance to your creatures.

Praised be you, my Lord, though Sister Water,

who is very useful and humble and precious and chaste.

Praised be you, my Lord, through Brother Fire,

through whom you light the night,

and he is beautiful and playful and robust and strong."

One of the books on the reading list we compiled for this talk, St. Francis of Assisi and Nature, Tradition and Innovation in Western Christian Attitudes toward the Environment, by Roger D. Sorrell, is a marvelous look at not only St. Francis but the context of his time, specifically Catholic views on nature in medieval times, and how his life marks a significant shift away from the biblical views on nature first originating from the story of Adam and Eve. To state simply, before Assisi untamed nature and animal life was seen by and large vulnerable to demonic presence and possession. While a young St. Francis showed an affection for hermetic consolation in nature, only in his maturity would he embrace and develop a larger view that would come to be known as Franciscan ideals, which saw animals in a compassionate light. It is probably easiest to get a feel for this in quoting his Sermon to the Birds directly, and while there are varying

translations and interpretations of the sermon, I quote one of the texts from Sorrel's book:

"My brothers, birds, you should praise your Creator very much and always love him; he gave you feathers to clothe you, wings so that you can fly, and whatever else was necessary for you. God made you noble among his creatures, and he gave you a home in the purity of the air; though you neither sow nor reap, he nevertheless protects and governs you without any solitude on your part (Omnibus trans)."

If you are curious about the history of St Francis, and the historical context as well as the variety of accounts of his life and writings I suggest taking a look at this book.

Returning to the 20<sup>th</sup> century, and I apologize for not going into more history but I am covering a lot of ground here- Pope Paul VI in 1971 in his apostolic letter Octogesima Adenines "A Call to Action" listed the environment as one of 11 new social problems the Church needed to confront. "Man is suddenly becoming aware that by an ill-considered exploitation of nature he risks destroying it and becoming in his turn the victim of his degradation." Following this inIn 1981 the US Conference of Catholic Bishops issued a statement titled "Reflections on the Energy Crisis" warning that "Future resource restrictions may force us to rethink our expectations; they may even lead to substantial changes in our way of life" In 1991 the organization called the environmental crisis a moral challenge and that environmental ethics be considered an integral part of Catholic teaching. Pope John Paul II as well the The year after becoming pope John Paul II began speaking on environmental issues, telling the United Nations that "the Church's commitment to the conservation and improvement of our environment is linked to a command of God."

Meantime some of the most extraordinary earth advocates and activists have been Catholic Nuns, who have long been interested in environmental issues. Sister Dorothy Stand had been in Brazil working for the Catholic Church's Pastoral Land Commission since 1966 in efforts to stop industrial interests violent removal of pastoral farmers from their land, and a strong opponent to deforestation, even testifying before a Brazilian congressional committee in 2004, until she was shot and killed at the age of 73 by two hired gunman. Brazil honored her legacy after her death by signing a decree to protect over 9 million acres of forest in her memory.

Another inspirational story comes from the Kentucky Sisters of Loretto who have organized to fight fracking, protesting the Bluegrass Pipeline, attending community meetings, even singing at open house sessions held by pro- fracking companies. There are many examples as well as groups like the Dominicas Sisters of Caldwell New Jersey who turned their 231 acres of land into "Genesis Farm" to practice "reverence for creation". The sisters are part of the organization and movement called Green Nuns, consisting of Catholic nuns from varying orders who focus on supporting ecological concerns. This relates to a larger movement in recent years that is reflected even locally as found in Ipswich, Mass, where the Sisters of Notre Dame granted a conservation restriction on 71 acres of vulnerable coastal wetlands to the Essex County Greenbelt, the Town of Ipswich and the Commonwealth of Massachusetts, an area that abuts other conserved land, forming a 7,000acre corridor of permanently protected public and private conservation lands. This is part of a local movement called "Religious Lands Conservation".

Backing up again I'd like to get back to two greatly inspiring figures in Catholic conservation, Thomas Merton and Pope Francis.

I first read Thomas Merton in my early twenties. Monica Weis has written a terrific book called The Environmental Vision of Thomas Merton which documents his life-long evolving and deeply spiritual relationship with the natural world. Another good read, less academic than Weis's is When the Trees Say Nothing, with an eloquent description of Merton's life in relation to nature, followed by excerpts of his writings organized by theme. While years ago I read a number of his books, more recently reading I was delighted to discover that Thomas Merton's parents were both artists, his father a landscape painter, which seems to have greatly influenced Merton's sensibilities. Merton was born in France but tragically lost both of his parents by the age of 16. After attending private school in England, he ended up going to the United States to his grandparents' home, and finished school attending attended Columbia University in New York City. In his very successful 1948 autobiography The Seven Story Mountain, Father Merton describes his notably unreligious early life history and his conversion to Christianity and then Catholicism in his early twenties. Increasingly sensing a pull towards the priesthood, in 1941 he resigned from teaching at Bonaventure College in New York and traveled to the Abbey of Gethsemani near Louisville, Kentrucky as he formally began his life as a Cistercian monk, scholar and writer. His spiritual journey led to over 50 books, thousands of poems, as well as essays and lectures. He is now greatly recognized as a significant writer, religious leader and social

critic in the American literary tradition. A major focus for him was his engagement with nature. and he He was personally responsible for forestry at the monastery in Kentucky, caring for land there, writing, and teaching, and traveling as far as Asia, where his life was tragically cut short in an accident at the age of 53.

Weis does an impressive job of documenting Merton's spiritual evolution in relation to nature and identifies specific events and natural places that were pivotal points in his life.

Some of the beauty of Thomas Merton's life is that we are able to accompany him through his writing, as he describes his religious conversion and documents both his monastic life in Kentucky along with an ever expanding consciousness that is open far beyond Western traditions, all along struggling with the currents of the volatile global and cultural times he lived. We witness his deeply felt connection to the natural world, in relationship to solitude, monasticism, spirituality and faith. I'll end on Merton with a quote ..... "The forms and individual characters of living and growing things, of inanimate beings, of animals and flowers and nature, constitute their holiness in the sight of God.

Their inscape is their sanctity. It is the imprint of His wisdom and His reality in them.

The special clumsy beauty of this particular colt on this April day in this field under these clouds is a holiness consecrated to God by His own creative wisdom and it declares the glory of God.

The pale flowers of the dogwood outside this window are saints. The little flowers that nobody notices on the edge of that road are saints looking up into the face of God.

This leaf has its own texture and its own pattern of veins and its own holy shape, and the bass and trout hiding in the deep pools of the river are canonized by their beauty and their strength.

The lakes hidden among the hills are saints, and the sea too is a saint who praises God without interruption in her majestic dance. The great, gashed, half naked mountain is another of God's saints. There is no other like him. He is alone in his own character; nothing else in the world ever did or ever will imitate God in quite the same way. That is his sanctity." From When the trees say nothing.

Getting back to the book that originally got me to reflect on Catholic environmentalism is Pope Francis's encyclical. For anyone interested in the subjects of climate change, the contemporary role of Catholicism with environmentalism, the challenges of global poverty and inequality, I would greatly encourage you to read it, . it It is not only an extraordinary document, it is also a great read. The New York Review of Books, a highly respected academic journal, has called it "one of the most influential documents of recent times" The Encyclical strikes me as having equal gravitas to any of of what we consider the Great Books of the Western Canon. I am also struck by the timely matter of this book, as the Pope calls for a global shift in consciousness- specifically for an Ecological Conversion, of spiritual, scientific, reasoning, technology, economy and humanity, for all of the earth.

Educated in science (specifically Chemistry) the Pope seems ideally positioned to present his eloquent overview of where we find ourselves today, which he describes as a spiritual, economic, biological and environmental crisis of our human relationship to the natural world. He outlines and affirms that most certainly climate change is due to human activity, he calls for a quick move from coal, gas and oil economies to renewable energy, and he reiterates that those that who suffer the most from the consequences of climate change are and will be, the poor. A large part of describing our contemporary state includes the dramatic inequalities of wealth and poverty and the causes and forces that have led to this situation. In his critiques he describes the problems of following what he calls a "technocratic paradigm" of seeking "progress" at any expense, with no moral accountability, as well as the painful consequences and deceptive mythologies and trust in financial markets alone, via profit and growth models that mistakenly mislead us in outdated pursuits of endless economic expansion, based on unsustainable exhaustion of the earth's limited resources, with no accountability of cost to environment,

pollution, or culture. He is also critical of trends in science and academia of extreme specialization- a type of thinking he describes that leads us to live amidst a chaos of information, within an utter lack of context. I greatly enjoyed his position on the roles of technology, science, and spirituality in relationship with our contemporary lives, and the earth and environment. In this sense he seems so well suited- as a scientist- to describe both the riches, and limits of science, and the hubris of thinking or looking to science for all of the universe's answers or more importantly, value. This is something that comes up a lot- a reminder of the church's position on what is, and what should be, properly, valued, in contemporary life. He discusses the topic of work, and it's critical importance to human life, and the costs of preferring global technological expediency without consideration of local economies or human worth. He reviews serious questions around Genetic modification, including the broader impact GMO crops have on small scale, local farms and economies. Issues of diverse versus global economies extends into a discussion of culture and the diminishment of local and indigenous cultures due to global consumer

oriented economies. He says" "the disappearance of a culture can be just as serious, or even more serious, than the disappearance of a species of plant or animal. The imposition of a dominant lifestyle,...can be just as harmful as the altering of ecosystems."

The Pope then makes great efforts to clarify the role of the natural world historically within the church and within scripture. This is both fascinating from a scholarly viewpoint but as well is his contemporary view, in which he discusses and reminds us of what our relationship as humans has been to the earth and nature up until the present, and what a relationship based on dignity, respect, spirituality, and responsibility should, and could, look like.

The pope calls to us and reminds us to keep the larger picture of a common good, over a distortedly historical idea of excess individualism, unaware and unconcerned about one's impact on the whole, of earth, environment, and other human beings. I have not touched on all of the subject matter in this book, there is a lot of interest to Catholics and those interested in religious history on the historical relationship of the church to nature, and arguments at the end, of the duty and responsibility of Catholics to holding a view of stewardship to the earth, in this book. At the end Pope Francis includes two beautiful prayers, that I think all faiths can appreciate, this one called A Prayer for our Earth:

"All-powerful God, you are present in the whole universe

And in the smallest of your creatures.

You embrace with your tenderness all that exists.

Pour out upon us the power of your love,

That we may protect life and beauty.

Fill us with peace, that we may live

As brothers and sisters, harming no one.

O God of the poor,

Help us to rescue the abandoned and forgotten of this earth,

So precious in your eyes.

Bring healing to our lives,

That we may protect the world and not prey on it,

That we may sow beauty, not pollution and destruction.

Tough the hearts

Of those who look only for gain

At the expense of the poor and the earth.

Teach us to discover the worth of each thing,

To be filled with awe and contemplation,

To recognize that we are profoundly united

With each creature

As we journey towards your infinite light.

WeE thank you for being with us each day.

Encourage us, we pray, in our struggle,

For justice, love and peace."

The last time I gave this talk at North Shore Community College I did not

talk about Catholic Environmentalism, and I had yet to read the entire Encyclical. There's so much to cover in this topic and I've only touched on a few things. Before this series of art I had been thinking a lot about nature and divinity, feeling a connection with Transcendentalism, if you are

not familiar was a (19<sup>th</sup> century philosophical movement which included writers such as Ralph Waldo Emerson and Henry David Thoreau). Giving it some thought I then decided , and the choice to start this series of art, was as a conscious attempt to engage with others and to bring light the impact of environmental neglect and climate change on local environments and the critical environmental situation we find ourselves in today. While many of the changes and threats are sobering and painful, despite the dire situation many of the earth's living creatures find themselves in, at the same time, I do remain fundamentally optimistic, and believe that while we have been experiencing so much change in the environmental impact due to globalization, we are also at the same time experiencing a shift in consciousness about around the earth and our role

in it, which gives me great hope for the future. I see younger people-like my nine- year old daughter- much more connected to the earth in a compassionate way than was true in recent generations.

As a child growing up in the 1970s I remember people throwing trash out of moving cars without a consideration, and terrible levels of pollution, including here in Massachusetts. How many of you are aware that Monsanto had a plant in Everett that heavily contaminated the Mystic River? From the Charles River Watershed association I quote "By the mid-1960's ... Raw sewage flowed from outmoded wastewater treatment plants. Toxic discharges from industrial facilities colored the river pink and orange. Fish kills, submerged cars and appliances, leaching riverbank landfills, and noxious odors were routine occurrences."

It scared me at that age- I remember being a child and afraid for the earth- and although climate change is more dire and frightening than I could have known then, I do see increased activism and awareness everywhere. So much has changed since my childhood- and as hard as it is to face the future, it is important to remember many attitudes have changed for the better. My hope however is that we continue to experience and demand increased transparency to the consequences of consumerism, and recognize the need to shift our views regarding economic success, growth and greed- to aspirations that care for the earth and all of its living beings' future. Who is to say that all non-human life on earth has any less right to be here, than we do? My environmental art series is intended to be a reminder of the gradual consequences that we face all around us- in our backyards so to speak- and how each individual can choose to make positive choices to help support the earth, every day, through consumer choices (to reuse, renew, recycle, conserve), energy choices (sustainability over fossil fuels) and lifestyle choices (transportation options, by taking a mature look at what we truly need versus consumption for status, desire, or ego). Ecophilosopher Joanna Macy in the book "Active Hope- How to face the Mess We're in without Going Crazy" describes a pattern of human, and specifically Western behavior in these terms up until now as "business as usual", a narrative that says that economies can and must continue to grow, which requires constantly

increasing sales, encouraging us to buy, and consume, more than we already do, and I quote:

"Young people may be told there is no alternative but to find their place in this scheme of things. Getting ahead is presented as the main plot, supported by the subplots of finding a partner, fending for your family, looking good, and buying stuff. In this view of life, the problems of the world are seen as far away and irrelevant to the dramas of our personal lives." This narrative fails to describe the consequences of endless consumption, including resource depletion, and climate change. Meantime she explains despite our current dilemmas, that we actually have the opportunity now to change, to make different choices, including what she calls "holding actions" - to protect what is left of our natural life support systems, and reinventing approaches to our lives - in healthcare, business, education, agriculture, transportation, communication, economics- via a creative redesign of the structures and systems that make our world. We see this happening now and I believe there is tremendous creative potential for the future. Lastly she says through shifting our

consciousness we can change our perception, thinking and values around all of this, to break "business as usual", and bring more balance to the earth, and our human lives, within it.

Likewise even if it is obvious, there are constructive opportunities for everyone, including busy students, to help the situation- we all make choices through our work and professions and our politics, through voting and making an effort to know and support policies that help the earth. And there are small ways that can be extremely supportive to native environments and species, such as planting native species (milkweed for example) and not overusing water, not using insecticides or pesticides that are harmful to all life forms, instead choosing earth and environmentally friendly options. Other important things you can do is support local economies, especially farms and farmers markets, and absolutely, if and when you are able to afford it, buying organic foods. Another earth friendly practice is choosing second hand goods and clothing. As much as new things have their allure, and I struggle like anyone else does, we can all stop and try to remember the big picture - and my hope is that with the

wisdom of understanding the impact endless consumption has on the earth, that we all can make better and informed choices for the benefit of all, if and when we are able. The fact is that no matter our desires, we cannot continue to produce and consume as we have for all of the earth's billions, we simply don't have the resources for it.

Young people are the future and as well will you direct the future for those who follow. It is important to stay informed on these issues that affect everyone and everything, that impact all future generations. These issues remind us to be critical about sources of information, and to not automatically take on the mythology of what the corporate world wants you to believe about what constitutes value. It's been wonderful to share all of this with you, I appreciate everyone taking the time to be here, and I hope you will recognize the great power you have to make meaningful and positive choices for the earth, all of its living beings, and its future, every day.

Thank you.